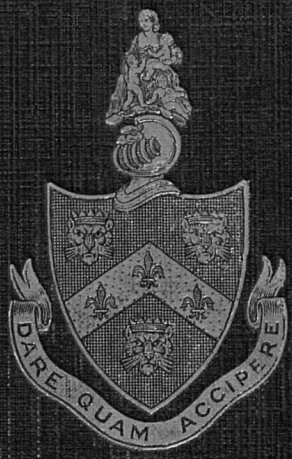
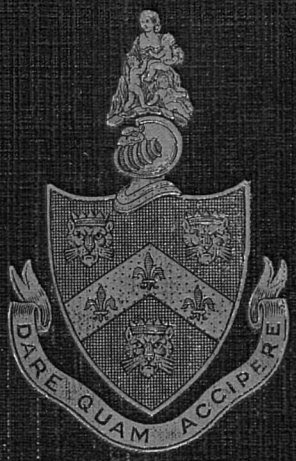
GUY'S
HOSPITAL
GAZETTE

NEW SERIES
VOL. 41

1927



Guy's Hospital Gazette.



Guy's Hospital Gazette.

GUY'S HOSPITAL GAZETTE.

VOL. XLI.

NEW SERIES.

1927.

LONDON:
ASH & CO., LTD., Printers, Southwark, S.E.
1927.

INDEX.

A

PAGE

Adventures of Lady Ursula 443, 455, 482, 544
A Fair Story for Nurses 239
Allen, Arthur Percy, Obituary 390
Anatomy 397
At Burlington House 86
Angina Pectoris and Allied Seizures, Clinical Lecture, Dr. J. A. Ryle 326
Antiquity, Medicine in, Dr. C. Singer 90, 127
A Nursery Rhyme 85
Appointments—
Civil 156, 190, 248, 268, 440, 444, 475
Guy's Hospital 46, 158, 190, 333, 370, 422, 533
The Services 88, 139, 340, 388
Appreciation, An, From a Patient 482
Armistice Day 481
Armitage Cup 323
Artificial Light Treatment, Correction 422
Assurance, Life, Notes on Medical Examination for, J. J. Conybeare 354
Athletic Club 248, 265, 369
University of London Appeal 289, 300
Auricular Fibrillation, A Case of, with Cerebral Embolism, Dr. J. M. H. Campbell 2

B

Bacteriologist, Extract from the Letters of a, in Persia 475
Bacteriology 401
Barendt, J. H., Death of 221
Obituary 252
Baths, The Old Royal 523
Bell, The Tyranny of the 180
Bibliography, G. A. R. Winston 105
Papers by Guy's Staff 89
Biennial Dinner 70, 244, 348, 422, 436, 459, 488
Bile Duct, Common, Stones in, Mr. R. P. Rowlands 72
"Billy Verdin," Some Hints on Urine Testing 167
Biology 397
Birt, L. R. B., Elected President of Residents 533
Births 24, 140, 156, 172, 188, 220, 248, 304, 340, 368, 440, 464, 480, 532, 571
Bishop, P. Maxwell, Control of Capillary Circulation 143
Bites, G. N. S. Weller 122
Blades, Sir Rowland (Lord Mayor of London), Visit to Guy's 270
Blues, Award of 360, 504, 551
Books 404
Boxing, Inter-Hospital Competition 154
Bridge 58, 80, 130
Brigham, W. E. L. 122
Bright, Richard, The Man and the Physician, W. S. Thayer 308
Centenary 290, 305
Special Number of the *Guy's Hospital Reports* 278
Oration 379

PAGE

Brock, R. C., Elected Vice-President of the Residents 370
Awarded Distinction at M.B., B.S. Examination 554
Bronchitis, Chronic, Dr. Marshall 376

C

Calculus, Urinary, An Unusual Case of, Diagnosed before Operation, J. G. W. 348
Calendar, Hospital, Christmas, 1927 534
Calhaem, T. M., Awarded Newland Pedley Gold Medal 466
Capillary Circulation, Control of, P. Maxwell Bishop 143
Campbell, Graham C., The Surgery of the Lung 199, 232, 253
The Rotunda Hospital, Dublin 275
Campbell, J. M. H., To Those Entering the Medical Wards 393
A Case of Auricular Fibrillation with Cerebral Embolism 2
Carbolic Spray 209, 243, 262
Carcinoma of the Pancreas, Diabetes and 447
Carcinoma of the Stomach, R. P. Rowlands 224
Cat, The, W. A. M. 332
Cerebral Embolism, A Case of Auricular Fibrillation with, Dr. J. M. H. Campbell 2
Cerebral Tumour, Two Cases of, C. P. Symonds 468
Change of Address, 12, 68, 109, 140, 156, 172, 181, 190, 196, 230, 288, 304, 333, 360, 388, 444, 467, 516, 552, 569
Change of Telephone Number 230
Chapel, Guy's Hospital 405
Chemistry 397
Children's Department 402
Christian Union, Guy's Hospital 81, 406
Christmas Cards 70, 506
Clean Milk Problem, A Discussion on, T. W. E. Pugh 48
Clinical Lectures—
Mr. R. Davies-Colley:
Some Affections of the Ribs 290
Mr. Dowsett:
Secondary Affections Due to Diseased Teeth and Oral Sepsis 534
Dr. R. D. Gillespie:
Sleep and the Treatment of Its Disorders 483, 508
Mr. M. F. Hopson:
Trigeminal Neuralgia, Secondary to Disease of the Teeth 174
Mr. E. C. Hughes:
Three Cases of Osteomyelitis of the Mandible 275
Mr. R. P. Rowlands:
Stones in Common Bile Duct 72
Dr. J. A. Ryle:
Angina Pectoris and Allied Seizures 326
Dr. C. P. Symonds:
The Diagnosis and Treatment of Acute Anterior Poliomyelitis 163
Some Late Effects of Head Injuries 342

369

PAGE

Clowes, Dr., Death of 141
Clubs' Union 362, 407
Officials 205
Rules 380
Year Book 174
Cohen, S. M., "Rest" in the Treatment of Cancer 295
Collection at Inter-Hospital Rugby Cup Final 141
Conybeare, E. T., Elected Sub-Editor *Guy's Hospital Gazette* 342
Conybeare, J. J., Notes on Medical Examination for Life Assurance 354
Correspondence—
A. J. M.:
Fund for the late H. W. Evans 525
Advertisement Extraordinary 133
A Londoner:
A Country Practice 41
An Appeal for a University of London Sports Ground and Boathouse 300
"1887":
Reminiscences 209
"1899–1905":
An African Case 59
B. A. M.:
Museum Specimens 525
Bend Sable:
University of London 16
Biennial Dinner 459
C. H. F.:
The Lister Centenary 209
Clubs' Union Council and Appeals 362
Dresser:
Modernising the Colonnade 287
Fund for the late H. W. Evans 496
H. W. Evans' Appeal Fund 570
Dr. Josiah Old Field:
Another Sidelight on Medical Life in India 362
R.A.M.C. as a Career 286
Senior Dresser:
An O.P. Letter 60
"Not a Mean Performer":
Ward Concerts 60
E. H. Starling Memorial Fund 476
E. Clifford Beale:
How Listerism Came to Guy's 186
Margaret Birkenhead:
General Lying-In Extension Fund 435
Mabel Bonsor:
G.H.L.A. Garden Fete 287
William F. Box:
An Amusing Incident 210
J. & A. Churchill:
The Operations of Surgery 546
W. Darley-Hartley:
Lister Centenary 285
Algernon Astley Denham:
Miss Louisa Harriet Denham 209
R. L. Duchesne:
Alteration to Clubs' Union Rules 380
C. Edwards:
Clean Milk and Bridge 109
J. W. H. Eyre:
Mercurochrome Injections 300
C. H. Fagge:
The Carbolic Spray 262

Correspondence—*continued* PAGE
R. B. Fawkes:
Herpes Zoster and Varicella 79
W. Hale-White:
The Lister Centenary Celebrations 187
J. B. Hance:
Medical Life in India 60
W. C. Hancock:
Thanks 15
Richard Gillbard:
General Practitioners and Hospital Treatment 436
Dr. McGuire 109
Percy H. Gray:
Dinner to the Mayor of Southwark 436
Roy C. Holloway:
Rugby Football 41
Gerald S. Hovenden:
Guy's '89 Club 170
Arthur F. Hurst:
Bibliographies 495
Chas. H. Johnson:
The Pavy Gymnasium 60
T. B. Johnston:
Professor Stokes' Memorial 460
E. H. Starling Memorial Fund 334
W. D. G. Jones:
Guy's Spectators 148
Date of Rugby Cup Final 570
Theo. L. Kark:
U.H. Swimming Club Gala 334
C. E. Keast:
An African Case 59
M. Aston Key:
The Carbolic Spray 243
Horace Mather:
Liverpool and North Western District Guy's Re-Union Dinner 546
R. Nunn May:
Guide to Library Facilities and Printed Sources of Bibliographical Information 41
H. Millett:
Guy's Spectators 148
W. M. Mollison:
The Carbolic Spray 243
John P. Moss:
Influenza 15
W. H. Ogilvie:
Bryden Glendining 285
F. W. Morton Palmer:
The Carbolic Spray 243
H. J. Starling:
H. W. Evans' Appeal Fund 570
C. L. Stevens:
A Clubs' Union Chess Club 525
F. Douglas Turner:
The Carbolic Spray 243
Montagu Way:
The Biennial Dinner 244
S. M. Wells:
On the Treatment of Varicose Veins and Ulcers by Injection 362
Mrs. Margaret White 262
Geo. A. Winston:
Museum of Antiquities 417
Court, P. F. S., Retirement from *Gazette* 342

PAGE

Cricket 235, 369
Resumé for 1927 385
Statistics for 1927 386
v. Bromley 220, 337
v. Chelmsford 336
v. Honor Oak 302
v. London (2nd Round, *Inter-Hospital Cup*) 301
v. Northampton 337
v. Old Charlton 287
v. Repton Pilgrims 287
v. Royal Dental Hospital (1st Round, *Inter-Hospital Cup*) 301
v. St. Bart.'s (Final, *Inter-Hospital Cup*) 349
v. St. George's Hospital (Semi-Final, *Inter-Hospital Cup*) 337
v. Streatham 336
v. Three Counties' Hospital 336
v. Wellingborough Masters 336
Croucher, S. H. 174
Cruise to the Schelde in a 5-Tonner, E. H. Roche 9, 37, 52
Cruise to the West Coast of France, E. H. Roche 539, 558
Cutler, R., Some Dental Cases 39
A Note on Hæmorrhage 258

D

Dance, Australia House 196
Cossacks' 85
Ladies' Association 482
Davies-Colley, R., Clinical Lecture, Some Affections of the Ribs 290
Deaths 88, 140, 156, 172, 304, 440, 532, 552, 571
Dental Cases, Some, R. Cutler 39
Curriculum, The 396
Society, Annual Dinner 2
Paper on Synthetics, by R. L. Duchesne 76
A Survey of the Materials Used in Denture Bases, a Paper read by C. S. Henderson 191
Student, To the, H. C. Malleson 391
Denture Bases, A Survey of the Material Used in, C. S. Henderson 191
Diabetes and Carcinoma of the Pancreas 447
Dismorr, Henry Bertram, Obituary 70
Dispensary, Annual Report 142
Dixon, Dr. John 26
Death of 141
Dowsett, Mr., Clinical Lecture, Secondary Affections Due to Diseased Teeth and Oral Sepsis 534
Dream of Delight, A 299
Duchesne, R. L., Synthetics 76
Dust, or Thy Name is Mud 298

E

Ear and Throat Department, Cases from 277
Eckhoff, N. L. B. V., Awarded Distinction at M.B., B.S. Examination 554
'89 Club, Annual Dinner 158
Electrical and Actinotherapeutic Dept. 404
Embolism, Cerebral, A Case of Auricular Fibrillation with, Dr. J. M. H. Campbell 2
Employees' Association Dinner 506
Ettles, D., Elected Vice-President of the Residents 89
Evans, H. W., Death of 482
Appeal Fund for 406, 525, 570
Obituary 483

F

Fencing 23, 66, 88, 119, 138
Lucas Tooth Instructors 479
v. R.N.C., Greenwich 479
"Farcius," Martha 108
Fever, Yellow, An Epidemic of, at San Salvador 445
Fibrillation, Auricular, A Case of, with Cerebral Embolism 2
Fifty Years Ago, O. B. Shelswell 260
Film Demonstrating the Modes of Infection 122
Football—
Association 411
v. Borough Market 187
v. East London College (1st Round, *University of London Cup*) 22
v. H.A.C. 479, 503
v. Old Bradfieldians 502
v. Old Citizens 463
v. Old Hurst Johnians 439
v. Old Westminster's 550
v. Royal Dental Hospital (Semi-Final, *Inter-Hospital Cup*) 137
v. St. Thomas's (Final, *Inter-Hospital Cup*) 137
v. St. Thomas's Hospital (Final, *Junior Inter-Hospital Cup*) 187
v. Southend Casuals 118
Rugby 41, 141, 158
Annual General Meeting 304, 462
Fixtures 44, 86, 411, 502
Statistics, 1926–27 217
Statistical Chart, 1926–27 218
Nomads *v.* Junior Staff 153
v. Aberavon 21, 570
v. Bedford 116
v. Bedford Thursday 478
v. Birkenhead Park 136
v. Blackheath 506, 528
v. Bristol 462
v. Cambridge University 116
v. Cardiff 43
v. Catford Bridge 438
v. Coventry 42, 419, 501
v. Devonport Services 117
v. Gloucester 438
v. Harlequins 477
v. King's (Final, *Inter-Hospital Cup*) 150
v. Llanelly 461
v. London Scottish 500
v. London Welsh "A" 501
v. Newport 21
v. Northampton 529
v. Old Alleynians 114
v. Old Blues 478
v. Old Dunstonians (2nd Round, *Senior Kent Cup*) 114
v. Old Dunstonians "A" (Final, *Kent County Junior Cup*) 171

Football, Rugby—*continued* PAGE
v. Old Blues "A" 530
v. Harlequins "A" 530
v. Old Leysians 64
v. Old Merchant Taylors 64
v. O.M.T. "A" 44
v. Plymouth Albion 135
v. R.A.F. 63
v. R.A.F. (Manston) (Semi-Final, *Junior Kent Cup*) 152
v. R.M.C., Sandhurst 247
v. Richmond 22, 550
v. Rosslyn Park 152
v. St. George's Hospital (1st Round, *Inter-Hospital Cup*) 115
v. St. Mary's (Semi-Final, *Inter-Hospital Cup*) 134
v. St. Thomas's (2nd Round, *Inter-Hospital Cup*) 134
v. Sidcup (Final, *Kent County Senior Cup*) 171
v. United Services 43
v. Westcombe Park (Semi-Final, *Senior Kent Cup*) 117
Fripp, A. T. 533
Fry, W. Kelsey, Notes on Synthetic Resin as Material for Dentures 554

G

Garden Fete, Guy's Hospital 221, 270, 287
Presentation to, by Miss Joyce Dennys 289
Garland, T. O., Selected for Rugby Trial 506
Gene, The 525
General Practice, Three Interesting Cases from H. S. Wacher 241
Genito-Urinary Dept. 403
Gibberd, G. F., Elected M.S. 26
Gibson, C. S., Synthetic Resin as Material for Dentures 554
Gillespie, R. D., Lectures on Normal Psychology 122
Sleep, and the Treatment of Its Disorders 483, 508
Glendining, Bryden, Obituary 252
Golf—
Annual General Meeting 464
Society 139, 219, 288, 319, 339, 366, 412, 420
v. St. Thomas's (1st Round, *Inter-Hospital Cup*) 464
Staff Cup 65
Staff Match 367
"Gridiron," Surgical Case Taking 182
Griffith, Miss D., Retirement of 26
Presentation to 46
Guyite Club, Junior, Annual Dinner 2, 538
Guy's, The Poet of 545
Guy's Hospital—
Alteration to Gates Facing Maze Pond 89
Appeal, Scala Theatre Performance 443
Appointments Committee 46
Branch of the L.I.F.C.U. 433
Chapel 139, 405, 534
Christian Union 131
Collecting Boxes 68
College Catering 46
Dental School, Time Table, Winter Term, 1927 416
Guy's Hospital—*continued* PAGE
Dental Society, Annual Dinner 142, 149
Paper on Bites, by G. N. S. Weller 122
Paper by C. A. Tomes on The Treatment of Pain in Dental Practice 158
Employees' Association 183, 506
Final Fellowship Course 68
Gazette's "Directory of Guy's Men" 27
Election of Editor 342
Innominate Society 220
Ladies' Association 84, 221
Dances 482
Garden Fete 270, 297, 369
Maternity Samaritan Fund 184
Medical School, Time Table, Spring Term, 1927 8
Time Table, Spring Term, 1928 572
Time Table, Summer Term, 1927 198
Time Table, Winter Term, 1927 415
Missionary Society 185
Musical Society 36
Nurses' League 281
Physiological Society, Paper read by T. W. E. Pugh on A Discussion on the Clean Milk Problem 48
Reports 46, 121, 278, 290
Bright Centenary Number 278, 307
Students' Club, Catering 47
Gymnastics 120

H

H. G. M., Three Cases of Ruptured Uterus during Parturition 357
Hæmorrhage, A Note on, R. Cutler 258
Hall, C., Awarded B.D.S. Degree 370
Hancock, Walter Charles, Presentation to 1, 12
Hare and Hounds—
United Hospitals 24
Inter-Hospital Cup 155
v. South London Harriers "A" 24
Harris, Rev. A. G., Elected Vicar of Plumstead 90
Institution and Induction at the Church of St. Nicholas, Plumstead 141
Head Injuries, Some Late Effects of, Clinical Lecture, Dr. C. P. Symonds 342
Health Notes, by a Surgeon Dentist 380
Help Yourself Society 441, 482
Henderson, C. S., A Survey of the Materials Used in Denture Bases 191
Awarded Third Year Prize in Dental Subjects 222
Hockey 67, 413
v. Depot of East Surrey Regiment 531
v. Dover College 87
v. East Grinstead 531
v. East Surrey Regiment 463
v. Kingston Grammar School 23, 551
v. Middlesex Hospital (1st Round, *Inter-Hospital Cup*) 118
v. Mid-Surrey 2nd 138
v. Nestanglo 551
v. R.M.A. 128
v. R.M.C., Camberley 24
v. Reigate 23
v. Rochester 23
v. Royal Naval College 67
v. St. Albans 503

Hockey—*continued* PAGE
v. St. Bart.'s (Semi-Final, *Inter-Hospital Cup*) 154
v. St. Thomas's (Final, *Senior Inter-Hospital Cup*) 188
v. Staff College, Camberley 217
v. Streatham 24
v. Wellington 2nd 87
Nurses 17
Hogg, Margaret, Retirement of 1
An Appreciation 173
Hopson, M. F. 421
Retirement of 173
Then and Now 449
Trigeminal Neuralgia, Secondary to Disease of the Teeth, Clinical Lecture 174
Housden, G. M., Elected Editor of Guy's Hospital *Gazette* 342
House Surgeon's Dilemma, The. Residents' Play 46, 96
An Appreciation 104
Hudson, W. F., Awarded Certificate for Clinical Medicine 289
Awarded Gold Medal for Surgery 289
Hughes, E. C., Three Cases of Osteomyelitis of the Mandible, Clinical Lecture 275
Hunt, Dr., Wreaths in Memory of 190
Memorial Library 379
Hyman, A. B., Awarded Distinction at M.B., B.S. Examination 554

I

Idiopathic Narcolepsy, A Case of 293
Illustrations—
Richard Bright 314
Bright Centenary 307
Garden Fete at Guy's Hospital 269, 270, 271, 272
Miss Margaret Hogg 261
If We Could Advertise—1, The Surgeon 566
The Niggers, 1926 35
Nurses' Hockey Team 17
The Rounds 361
The Rowing Eight 322
Mrs. Rowland's Garden at Ewhurst 251
E. H. Starling 223
R. Lewin Payne 197
A Portrait of a Dentist by a Patient 206
The Morning After 231
The Passionate Medico in Love 293
An American's Conception of the English Dental School (Cartoon) 294
Infarcts, Pulmonary, A Case of, Following Operation on the Mastoid, Intravenous Injections of Mercurochrome, Recovery, S. T. Williamson 277
Introduction, By Way of, F. J. Steward 391

J

Johnston, T. B., To Those Undertaking the Pre-Clinical Sciences 392
John Tomes' Prize on Histology and Pathology of Dental Tissues 250
Jones, Cyril Lloyd, Death of 354
Jumble Sale in the Massage Department 133

K

PAGE
Kenshole, H. H., Awarded Certificate for Newland-Pedley Prize 466

L

Laidlaw, P. P., Elected F.R.S. 90
Lambeth General Lying-In Hospital 422
Landon Out-Patients' Tea Fund 1, 47, 184, 482, 506
Larkin, Frederick George, Obituary 71
Laver, B. L., Appointed Surgeon to the Northampton Hospital 89
Retirement as Surgical Registrar 142
Lawn Tennis 155, 320, 369, 413
Annual General Meeting 531
v. Beddington Park 246
v. Beddington Park 2nd VI 247
v. Caledonian 2nd VI 247
v. House of Commons 368
v. King's 2nd VI 247
v. King's College (1st Round, *Senior Inter-Hospital Cup*) 302
v. King's College Hospital (1st Round, *Junior Inter-Hospital Cup*) 264
v. London Hospital 2nd (Semi-Final, *Junior Inter-Hospital Cup*) 352
v. London School of Economics 2nd VI 265
v. Old Citizens' 1st VI 220
v. Prof. Johnston's VI 368
v. Royal Dental Hospital (2nd Round, *Junior Inter-Hospital Cup*) 303
v. St. Bart.'s 2nd VI 219
v. St. Stephen's, Fulham (*Nurses' Lawn Tennis Cup*) 302
v. St. Thomas's 2nd (Final, *Junior Inter-Hospital Cup*) 384
v. St. Thomas's (Final, *Senior Inter-Hospital Cup*) 351
v. Shirley Park 2nd VI 247
v. Westminster Bank 265
United Hospitals, General Meeting 119
Layton, T. B., On the Carriage of Sick and Injured by Aeroplane in Civil Life 207
Life Assurance, Notes on Medical Examination for, J. J. Conybeare 354
L.I.F.C.U., The Guy's Hospital Branch of the 433
Light and Heat in Medicine and Surgery 506
Lister Centenary 187, 209, 285
Lung, The Surgery of, Graham Campbell 199, 232, 253
Lymphatic System, The Physiology of, C. Keith Simpson 489
The Pathology of, S. Shone 517

M

M., W. A., The Cat 332
Macmanus, E., Appointed Matron 2
Maggs, W. A., The Rotunda Hospital, Dublin 318
Maister, H. I., A Case of Meningeal Cyst—Operation, Recovery 277
Malleson, H. C., Awarded John Tomes' Prize on Histology and Pathology of Dental Tissues 250
To the Dental Student 391

PAGE

Mandible, Osteomyelitis of, Three Cases of, Clinical Lecture, Mr. E. C. Hughes 275
Marriages 288, 304, 324, 340, 352, 440, 532, 552
Marsh, F., Appointed Bacteriologist to the Anglo-Persian Oil Co. 2
Marshall, Dr., Chronic Bronchitis 376
Martha, by Farcius 108
Massage Dept. 403
Jumble Sale in 133
Mastoid, A Case of Pulmonary Infarcts following Operation On, Intravenous Injections of Mercurochrome, Recovery, S. T. Williamson 277
Matron, Appointment of 2
Matthews, Miss D., Appointed Sister Surgery 26
May Fair Ball 557
Mecca, The Return From 451
Medical Curriculum, The 397
Medical Examination for Life Assurance, Notes on, J. J. Conybeare 354
Medical Practice and Training, Reforms in 454
Medical Wards, The, To Those Entering, J. M. H. Campbell 393
Medicine in Antiquity, Dr. C. Singer 90, 127
Medico-Neurological Clinic 402
Merely Males, A Nursery Rhyme 85
Mikado, The 533
Milk, A Discussion on the Clean Milk Problem, T. W. E. Pugh 48
Museum of Antiquities 417
Musical Society 79, 410, 533

N

Narcolepsy Idiopathic, A Case of 293
National Union of Students 27
Nephrectomy, A Case of Renal Calculus complicating Pregnancy, and Spontaneous Delivery at Full Term 543
Neurological Department, A Case from 293
Newland-Pedley Gold Medal 158, 466
Niggers, The 1, 34, 482, 553
Northfield, D. W., Elected President of the Residents 89
Notices—
The Cossack's Dance 85
Dance at Australia House 196
Dental School, Fourth Year Prize in Dental Subjects 250
Prof. Shennan, *Post-Mortems and Morbid Anatomy* 464
Supplement to Bright Centenary Number, *Guy's Hospital Reports* 276
Vacancies 380
Nurses, A Fair Story for 239
Hockey Club 17
Nursing News 16, 63, 170, 185, 208, 363, 524

O

Obituary—
Arthur Percy Allen 390
J. H. Barendt 252
Henry Bertram Dismorr 70
Henry William Evans 483
Bryden Glendining 252
Frederick George Larkin 71
Col. Peter Paget 467
Obituary—continued PAGE
William Guy Pinching 296
Alfred Scott 70
E. H. Starling 222
Professor Adrian Stokes 442
Dr. Tyson 422
John Caldwell Uhthoff 70
Notices 370
Obstetric and Gynæcological Wards 400
Ogilvie, W. H., To Those Entering the Surgical Wards 394
Old Royal Baths, The 523
On the Carriage of Sick and Injured by Aeroplane in Civil Life, T. B. Layton 207
Ophthalmic Dept. 402
Oral Sepsis, Secondary Affections Due to Diseased Teeth and, Clinical Lecture, Mr. Dowsett 534
Orthopædic Dept. 403
Osteomyelitis of the Mandible, Three Cases of, Clinical Lecture, Mr. E. C. Hughes 275
Oto-Rhino-Laryngological Dept. 402
Out-Patients, Attendances, Time Table 422, 434
Casualty Departments, Donation by Sir Gilbert Wills 25

P

Paget, Col. Peter, Obituary 467
Pain, The Treatment of, in Dental Practice, C. A. Tomes 158
Pancreas, Diabetes and Carcinoma of the 447
Papers by Guy's Men, 12, 36, 68, 107, 126, 156, 172, 230, 268, 288, 340, 388, 440, 444, 471, 532, 552
Passim, 1, 25, 45, 69, 89, 121, 141, 157, 173, 189, 221, 249, 269, 289, 305, 325, 341, 353, 369, 389, 421, 443, 465, 481, 533, 553
Pass List—
Conjoint 120, 139, 248, 387, 532, 552
Pre-Medical Examination 120
L.D.S. 156, 387, 480, 532
London School of Tropical Medicine 139
Royal College of Surgeons of England—
F.R.C.S. 288, 533
M.S. 26
Society of Apothecaries of London, 44, 120, 139, 172, 248, 268, 324, 352, 388, 480, 552
Royal Naval Dental Service 122
University of Cambridge, 44, 139, 248, 288, 304, 532, 571
B.A. 120
Diploma in Medical Radiology 388
University of Durham 44
University of Edinburgh, F.R.C.S. 288
University of London 68
M.B., B.S. 172, 181, 288, 340, 388, 571
M.D. 340
B.D.S. 352, 370
University of Oxford 156, 571
Passionate Medico in Love 293
Pathology 401
Of the Lymphatic System, S. Shone 517
Pavy Gymnasium 88
Persia, Extracts from the Letters of a Bacteriologist in 475
Pharmacy, Materia Medica and Dispensing 404

PAGE

Physical Society, Paper Read by Graham Campbell on The Surgery of the Lung 199, 232, 253
Physical and Physiological Society, Joint Meeting 489, 517
Physiology 398
Of the Lymphatic System, C. Keith Simpson 489
Physiological Society 405
Paper on The Functions of the Stomach, read by D. B. Smallshaw 370
Physics 397
Pinching, Wm. Guy, Obituary 296
Pre-Clinical Sciences, To Those Undertaking the, T. B. Johnston 392
Pneumonia, Lobar; Acute Veronal Poisoning; Bed Sores, etc.; Recovery, S. M. Wells 346
Poem, *A Nursery Rhyme* 85
Poet of Guy's, The 545
Poisoning, Veronal, Acute; Lobar Pneumonia; Bed Sores, etc.; Recovery; S. M. Wells 346
Poliomyelitis, Acute Anterior, The Diagnosis and Treatment of, C. P. Symonds, Clinical Lecture 163
Prichard, R. F., Awarded Annual Prize in Operative Dental Surgery 222
Prizes—
Arthur Durham Travelling Studentship 290
Fourth Year in Dental Subjects 250
Newland-Pedley Gold Medal 158
Operative Dental Surgery 222
Third Year in Dental Subjects 222
Treasurer's Gold Medal for Clinical Medicine 289
Treasurer's Gold Medal for Surgery 289
Psychology, Normal, Lectures by R. D. Gillespie 122
Publications Received 71
Pulmonary Infarcts following Operation on the Mastoid, A Case of, Intravenous Injections of Mercurochrome, Recovery, S. T. Williamson 277
Pugh, T. W. E., A Discussion of the Clean Milk Problem 48
Pupils' Physical Society 408, 495

Q

Queen Alexandra Memorial Fund 250

R

R., J. R., A Case of Idiopathic Narcolepsy 293
"Rags" 482
Rake, G. W., Awarded Treasurer's Gold Medal for Clinical Medicine 289
Awarded Certificate for Surgery 289
Ramsey-Lacey, Dr. Allan, Death of 354
References, The Compilation of, G. A. R. Winston 472
Reforms in Medical Practice and Training 454
Registrar-General's Statistical Review for 1925, Extracts from 426
Reminiscences of Forty Years 178
Renal Calculus, A Case of, Complicating Pregnancy, Nephrectomy and Spontaneous Delivery at Full Term 543

PAGE

Residents, Newly Elected Officers 89, 370, 533
Play, *The House Surgeon's Dilemma* 46, 70, 96
"Rest" in the Treatment of Cancer, S. M. Cohen 295

Reviews—
Lucy E. Ashby, Health Visitors' Guide 168
Hamilton Bailey, Physical Signs in Clinical Surgery 527
G. E. Beaumont, Recent Advances in Medicine 169
O. Bernhard, Light Treatment in Surgery 476
N. Langdon Brown, The Endocrines in General Medicine 548
A. R. T. Browne, Medical Electricity for Students 365
F. J. Browne, Advice to the Expectant Mother 214
J. M. Bruce and W. J. Dilling, Materia Medica and Therapeutics 456
Arthur Bulleid, A Text Book of Bacteriology for Dental Students 215
E. T. Burke, Treatment of Venereal Disease in General Practice 211
Harold Burrows, Surgical Instruments and Appliances 365
Lewis Bushy, A Manual of Surgical Anatomy 418
S. J. Cameron and John Hewitt, Difficult Labour 211
Harry Campbell, Aids to Pathology 132
T. I. Candy, Lenk's Index and Handbook of X-Ray Therapy 214
C. W. Chapman, The Heart and Its Diseases 548
A. J. Clarke, Applied Pharmacology 215
Stanley Cock, Ten Little Nigger Boys 455
Robert Coope, The Diagnosis of Pancreatic Disease 527
Cooper and Nicholas, Aids to Biochemistry 526
Zachary Cope, Clinical Researches in Acute Abdominal Disease 547
The Treatment of the Acute Abdomen, Operative and Post-Operative 84
James Crockett, Tuberculosis 215
H. Warren Crowe, The Treatment of Chronic Arthritis and Rheumatism 244
E. F. Cumberbatch, Diathermy 549
Cunningham's Manual of Practical Anatomy 498
Harvey Cushing, Studies in Intra-Cranial Physiology and Surgery 168
A. V. Elder, The Ship Surgeon's Handbook 364
Guilio Fano, Brain and Heart 82
John Frazer, Surgery in Childhood 111
French (Herbert) and Nuthall (Tallent), Medical Laboratory Methods and Tests 301
Alexander George Gibson, The Heart 17
A. G. Gibson and W. T. Collier, The Methods of Clinical Diagnosis 417
A. H. Godson, The Operation of Surgery 496
Dr. Katherine Grainer, Case Sheet, Artificial Light Treatment 383
E. W. Hey Groves, A Synopsis of Surgery 528
R. Burnett Ham, A Book on Diseases of the Nervous System (Organic) 457

Reviews—*continued* PAGE

Col. L. W. Harrison, The Diagnosis and Treatment of Venereal Diseases in General Practice 20
F. Hartley, Modern Methods in Heart Disease 17
W. F. Theodore Hauldin, A Practical Handbook of Midwifery and Gynæcology 132
D. K. Henderson, A Text Book of *Physiology* 335
O. Stanley Hillman, Operative Surgery Described for Nurses 527
Robert Howden, Gray's Anatomy, Descriptive and Applied 113
Robert Hutchison, The Elements of Medical Treatment 42
A. S. Irving, Short Notes and Mnemonics of Anatomy 213
W. K. Irwin, Urinary Surgery 334
W. R. Jack, Wheeler's Handbook of Medicine 498
J. D. H. Jamieson, Outlines of Dental Surgery 527
Marc Jaquerod, The Natural Process of Healing in Pulmonary Tuberculosis 61
J. H. Johnston and R. H. Simpson, The Principles of Practical Bacteriology 456
R. W. Johnstone, A Text Book of Midwifery 212
P. N. Tookey Kerridge, Principles of Physical Chemistry for Medical Students 210
David Lees, Diagnosis and Treatment of Venereal Diseases 458
Oscar L. Lewin, Your Hair and Your Health 210
R. J. McNeill Love, A Shorter Surgery 366
F. Mc. G. Loughnane, A Handbook of Renal Surgery 216
F. J. McCann, The Effects of Contraception Practices on the Female Sexual Organs 418
J. E. R. McDonagh, The Nature of Disease 457
Archibald McKendrick and C. R. Whittaker, An X-Ray Atlas of the Normal and Abnormal Structures of the Body 549
Sir James Mackenzie and James Orr, Principles of Diagnosis and Treatment in Heart Affections 17
A. I. G. McLaughlin, Diseases of the Heart and Lungs 132
Richard Muir, Bacteriological Atlas 210
Robert Muir, Manual of Bacteriology 498
Sir George Newman, Interpreters of Nature 262
K. C. Paul, The Carrier Problem 61
A. Piney, Recent Advances in Hæmatology 334
John Pryde, Recent Advances in Biochemistry 170
J. R. Riddell, *Medical Electricity* and Radiology 214
W. H. C. Romanis and Philip H. Mitchiner, The Science and Practice of Surgery 496
R. P. Rowlands and P. Turner, The Operations of Surgery 458
Claude Rundle, Ker's Manual of Fevers 418
E. H. Russell and W. K. Russell, Ultra-Violet Radiation and Actinotherapy 476
Robert John Stewart, Clinical Physiology 244

Reviews—*continued* PAGE

W. H. B. Stoddart, Mind and Disorders 381
F. G. Thomson and R. G. Gordon, Chronic Rheumatic Disease 110
R. E. Tottenham. Aids to Gynæcology 499
Sir Frederick Treves, Surgical Applied Anatomy 499
Logan Turner, Diseases of the Ear, Nose and Throat 499
W. J. Tyson, Medical Notes 168
W. W. Wakefield and H. P. Marshall, Rugger 547
Kenneth M. Walker, The Enlarged Prostate 169
Mary D. Waller, Practical Physics for Medical Students 546
Sir Wm. Hale-White, Richard Bright and His Works 547
Materia Medica 499
C. R. Whittaker, Operative Surgery 20
A. S. Woodwark, Manual of Medicine 263
Samson Wright, Applied Physiology 263
Anatomy, Part VI, Bones, Catechism Series 437
"Anomaly," The Invert and His Social Adjustment 365
Diary of Appointments for 1928, with Address Book 458
"Doctor Robin," What It Feels Like: Letters from a Doctor out East to a Colleague at Home 84
Faith and Friendship 113
Guy's Hospital Reports, Vol. 76, No. 4 62
Vol. 77, No. 1 186
Vol. 77, Nos. 3 and 4 497
Hints to Probationer Nurses in Mental Hospitals 132
Histology, Catechism Series 549
Lancet Extra Numbers (No. 2), Early Mental Diseases 110
The Conduct of Medical Practice 364
Lecithin and Allied Substances 263
Mental Diseases 83
The Nursing Mirror Pocket Encyclopædia and Diary 214
Physics, Part II, Catechism Series 526
Rugby Football Annual 456
St. Bartholomew's Reports, Vol. lix, 1926 112

Ribs, Some Affections of the, Clinical Lecture, Mr. R. Davies-Colley 290
Rifle Association 26, 66, 139, 219, 369
Armitage Cup 304, 323
United Hospitals 323
Roche, E. H., A Cruise to the Schelde in a 5-Tonner 9, 37, 52
A Cruise to the West Coast of France 539, 558
Rotunda Hospital, Dublin 273
W. A. Maggs 318
Rowing Club 250, 369
Inter-Hospital Races 321
Rowlands, R. P., Stones in Common Bile Duct 72
Carcinoma of the Stomach 224
Royal College of Surgeons, Lectures 70
Royal Society, Election of Fellows 89
Ryle, J. A., Angina Pectoris and Allied Seizures, Clinical Lecture 329

S

PAGE

Sailing Club ... 9, 37, 46, 52, 67, 479, 539
Annual Regatta ... 342, 367, 480
Sale, F. J., Appointed Obstetric Resident ... 554
San Salvador, An Epidemic of Yellow Fever at 445
Scala Theatre, Charity Performance in Aid of Guy's ... 443, 482
Schelde, The, A Cruise to, in a 5-Tonner, E. H. Roche ... 9, 37, 52
Scholarships ... 422
Four More ... 557
Scott, Alfred, Obituary ... 70
Scott-Turner, A. ... 174
Services, The ... 139, 268, 340, 444
Army Dental Corps ... 120, 156
Royal Naval Medical Service ... 156, 248
Shelswell, O. B., Fifty Years Ago ... 260
Sick, On the Carriage of, and Injured by Aeroplane in Civil Life, T. B. Layton 207
Shone, S., The Pathology of the Lymphatic System ... 517
Sidelights from the Sudan, A Journey to Abyssinia ... 474
Simpson, C. Keith, The Physiology of the Lymphatic System ... 489
Singer, Dr. C., Medicine in Antiquity ... 90, 127
Sleep and the Treatment of Its Disorders, Clinical Lecture, R. D. Gillespie ... 483, 508
Smallshaw, D. B., The Functions of the *Stomach* ... 370
Southwark, Mayor of, Dinner to ... 422
Spahlinger Treatment ... 69
Specialities—
The British Medical Protection Society ... 352
J. & A. Churchill, Change of Address ... 516
"Eatan" ... 296
E. & S. Livingstone ... 425
The Medical General Insurance Association, Ltd. ... 208
Medical Sickness Annuity and Life Assurance Society ... 297
"Pomsoma" ... 208
Messrs. A. Wander, Ltd. ... 482
Who's Who in the Medical World ... 108
Spurrell, W. R. ... 26
Appointed Surgical Registrar ... 142
Elected M.S. ... 26
Starling, E. H., Death of ... 190
Memorial Fund ... 434, 476
Obituary ... 222
Steward, F. J., By Way of Introduction ... 391
Stokes, Adrian—
Death of ... 390
Memorial Fund ... 460
Service ... 421
Obituary ... 442
Stomach, Carcinoma of, R. P. Rowlands ... 224
The Functions of, D. B. Smallshaw ... 370
Stones in Common Bile Duct, R. P. Rowlands ... 72
Students' October Entry, 1927 ... 414
Sudan, Sidelights from the ... 432, 474
Sun, Total Eclipse of, June 29th, 1927, R. L. Waterfield ... 279, 329
Surgical Case Taking, "Gridiron" ... 182
Surgical Wards, The, To Those Entering, W. H. Ogilvie ... 394

PAGE

Swimming Club ... 245, 304, 369, 420
Annual General Meeting ... 119, 551
American Banks of London S.C. Gala ... 439
v. Brighton College ... 267
v. Cambridge University ... 321
v. Dulwich Common ... 266
The Fillebrook S.C. Gala ... 440
v. Forest Hill ... 267
v. Grafton ... 267, 368
v. Hampstead Priory ... 246
v. Monson ... 267, 320
Nurses' Gala ... 504
v. Oxford University ... 320
v. R.M.A., *Woolwich* ... 245
v. St. Paul's School ... 246
United Hospitals' Annual Gala ... 334, 338
Symonds Dr. C. P.—
Some Late Effects of Head Injuries, Clinical Lecture ... 342
The Diagnosis and Treatment of Acute Anterior Poliomyelitis, Clinical Lecture ... 163
Two Cases of Cerebral Tumour ... 468
Synthetics, R. L. Duchesne ... 76
Synthetic Resin as Material for Dentures, Prof. C. S. Gibson ... 554
Notes, W. Kelsey Fry ... 555

T

Thayer, W. S., Richard Bright, The Man and the Physician ... 308
Then and Now, M. F. Hopson ... 449
Thirty Club, Annual Dinner ... 141
Three Interesting Cases from General Practice, H. S. Wacher ... 241
Tobias Smollett, M.D., 1721–1771 ... 424
Tomes, C. A., The Treatment of Pain in Dental *Practice* ... 158
Total Eclipse of the Sun, June 29th, 1927, R. L. Waterfield ... 329
Treasurer's Prize, The Surgery of the Lung, Graham Campbell ... 199, 232, 253
Trend of Modern Research ... 359
Trick, S. R., Elected Vice-President of the Residents ... 533
Trigeminal Neuralgia, Secondary to Disease of the Teeth, Clinical Lecture, M. F. Hopson ... 174
Tuberculosis Dept. ... 403
Tyranny of the Bell ... 180
Tyson, Dr. ... 422

U

Uhthoff, John Caldwell, Obituary ... 70
United Hospitals—
Boxing ... 154
Hare and Hounds ... 24
Inter-Hospital Cup ... 155
v. Imperial College of Science ... 67
v. South London Harriers "A" ... 24
v. Thames H. and H. "A" ... 86
Rifle Club ... 323
Armitage Cup ... 323
Sailing Club, Inter-Hospital Regatta ... 367
Swimming, Annual Gala ... 338

PAGE

University of London, Athletic Appeal 289, 300
O.T.C. 409
Urinary Calculus, An Unusual Case of, Diagnosed Before Operation, J. G. W. 348
Urine Testing, Some Hints on, "Billy Verdin" 167
Uterus, Ruptured, Three Cases of, During Parturition 357
Utting, Sir John, Death of 122

V

Venereal Disease Dept. 403
Veronal Poisoning, Acute; Lobar Pneumonia; Bed Sores, etc.; Recovery, S. M. Wells 346

W

Wacher, H. S., Three Interesting Cases from General Practice 241
Waldo, Dr., On Coroner's Court Fees 2
Walkerite Denture Process, Demonstration 466, 550
Walmsley, C. G., Awarded Certificate in Operative Dental Surgery 222
Awarded B.D.S. Degree 370
War Memorial Scholarship 422
Ward Concerts 25, 27, 28, 29, 30, 31, 32, 33, 51

PAGE

Wards, Work in the 399
Waterfield, R. L., The Total Eclipse of the Sun, June 29th, 1927 ..... 279, 329
Weller, G. N. S., Bites 122
Wells, S. M., Acute Veronal Poisoning; Lobar Pneumonia; Bed Sores, etc.; Recovery 346
Wenyon, C. M., Elected F.R.S. 90
Williams, L. S., Elected President of the Residents 370
Wills, Sir Gilbert, Donation to Guy's Hospital 25
Williamson, S. T., A Case of Pulmonary Infarcts following Operation on the Mastoid, Intravenous Injections of Mercurochrome, Recovery 277
Winston, G. A. R., Bibliography 105
The Compilation of References 472
Museum of Antiquities 417
Papers by Guy's Staff 88

X

X-Rays, Surgical, Out-Patients, Removal of 222

Y

York, Duke and Duchess of 289

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *January 1st, 1927.* *Number 1003*

PASSIM

AS this number has the unusual distinction of appearing on the first day of the year—perhaps some mathematician will supply the numerical possibilities of recurrences of such an event—we cordially reiterate our best wishes for A.D. 1927.

THE spirit of the Niggers has been expressed admirably by Sir Walter Scott in the lines :

" Then came the merry maskers in,
And *tunes were* roared with blithesome air.
If unmelodious was the song,
It was a hearty note and strong."

This spirit was enthusiastically revived on Christmas Day, when all the performances from the very first went with a jolly swing and were greatly appreciated by all. The disguises were excellent, several men being completely and ridiculously unrecognisable. And we have seldom heard so many well conceived and original quips and sallies. Though one or two were somewhat indigestible, the Residents are to be congratulated on their exhibition of a " pretty wit."

The President of the Residents (Mr. A. C. Copley) as Massa Johnson nobly lived up to the reputation of " working like a nigger." His example and vivacity were a powerful stimulus to the rest of the troupe.

The Children's Tea at Out-Patients was surprisingly less noisy than usual this year. We surmise that the quantity of good things provided had lulled them into a state of placid and well fed contentment by the time the Niggers appeared, for although they did not give loud voice to their satisfaction there was abundant evidence of it on their faces.

In the evening the Residents held their Christmas Dinner, and a more rollicking—though slightly incoherent—function we have never attended. This surely was a dinner that will go down in history.

In ordinary life Christmas does not survive long after Boxing Day, but the Hospital, anticipating to some extent, Mr. G. Bernard Shaw, spreads it out to the New Year, advertisement of which is artistically displayed in the colonnade. We hold over full accounts of the Niggers, and of the activities in the wards during the past week for the next publication.

The Wards were as tastefully decorated as ever this Christmas and it is difficult to single out any particular one. Evelyn as " Springtime in Old Japan," struck a very pleasantly colourful and romantic note, while Naaman as a Box of Wooden Soldiers was decidedly original.

ON another page is published an account of the presentation of a cheque for £280 16*s.* 9*d.* to " Doc " Hancock and a cake basket to his wife by the Medical School and old Guy's men. A most outstanding feature of this function was the reading of a few of the many letters from Guy's men all over the world—all expressing an affectionate regard.

It is surely an honour higher than any title to have good friends in all the four corners of the earth.

IT is with sincere regret that we announce the impending retirement of Miss Margaret Hogg from the position of Matron of the Hospital. Elsewhere is published a brief account of Miss Hogg's nursing

career. She is to be succeeded by Miss E. Macmanus, who is at present Matron of the Bristol Royal Infirmary. Miss Macmanus is very well known at Guy's and will be welcomed back most warmly.

▭

On December 15th the Junior Guyite Club held its Annual Dinner at Gatti's Restaurant. In the absence of J. B. Howell, Esq., M.R.C.S., A. Allport, Esq., M.R.C.S., L.R.C.P. (a name very famous in the annals of Guy's sport) took the chair.

A very enjoyable evening was spent, to which several extremely good musical items added greatly.

There is something unique and very attractive about a gathering such as this where a few representatives of all generations of Guy's men gather together informally for a pleasant evening.

▭

We have been asked to announce that the Dental Society's Annual Dinner will be held at the Trocadero Restaurant, Piccadilly, on Saturday, March 12th, 1927, instead of the date previously announced.

We congratulate Mr. F. Marsh, M.B., B.S., on his appointment as Bacteriologist to the Anglo-Persian Oil Company. He has recently sailed to take up the position in Persia.

▭

We have received a letter from Dr. Waldo—the Coroner for our Division—in which he draws attention to the section of the Coroner's (Amendment) Act, which rules that medical men holding institutional appointments will receive equal and increased fees with non-institutional medical men for giving evidence on cases dying while under their care. The Act comes into force on May 1st, 1927. By the new Act the fee for a P.M. examination and evidence is £3 3*s*. in place of £2 2*s*. For being summoned to give evidence alone the new fee is £1 11*s*. 6*d*. in place of £1 1*s*.; also there is a fee of £1 11*s*. 6*d*. for each appearance on days following the opening of the inquest.

Dr. Waldo has at all times championed the cause in the matter of fees for Residents at Hospitals, and we offer him our best thanks for the part he has taken in getting the amendment passed.

A Case of Auricular Fibrillation with Cerebral Embolism.

Clinical Lecture by Dr. J. M. H. Campbell.

GENTLEMEN,—You will find that most of your clinical knowledge—certainly all the best parts of it—is built up on individual cases you see rather than on those you read about. That is why I have chosen to lecture to-day on one particular patient, and I am going to give you his history fully and discuss various things which arise from it.

It is the story of a man, aged 22, who was admitted to this Hospital in May, 1919, for breathlessness and pain in the chest. There was nothing of interest about his family history, and the only previous illness was that he had scarlet fever at the age of six, and he had been liable to bronchitis in the winter since. He had been well until ten days before admission, when he was taken ill with a dental abscess and a sore throat, and at the same time he became very short of breath and his legs and abdomen became swollen.

Signs of Cardiac Failure.—This was the starting point of his cardiac failure, for when he came into Hospital that is what was found. There was œdema of his feet, crepitations at the base of both lungs, and an enlarged liver. These are three important signs that you want to look for in every patient where there is the possibility of cardiac failure. You will suspect it strongly in a history in which these signs are combined with increasing dyspnœa. In this case pre-cordial pain was complained of rather prominently, but it is almost more usual for precordial pain to occur in those who have not got heart trouble. The main thing was his shortness of breath, some general pain, and, as regards signs, he showed those three to a considerable degree. In some patients you will find one of these much more marked than the others.

Œdema of both feet is perhaps the most valuable of all signs, and if you find it to any marked degree without signs of renal disease the probability is that there is cardiac failure. Supposing you know nothing about the patient beyond the fact that he has a considerable degree of œdema of both feet, you will conclude that that points strongly towards heart disease; but supposing you know that he has heart disease, and you find some degree of œdema, that becomes of even greater significance.

Another important sign is crepitations at the base of the lung. You may find in a patient a few crepitations on the first deep breath, but if you find they continue with deep breathing, and there is nothing to suggest lung disease, you are likely to be dealing with cardiac failure. If you find œdema of the feet as well, then it is more likely.

If you turn to an examination of the liver and find it enlarged and tender, that makes it almost certain. You do not feel a liver edge as readily in a lot of these cases of cardiac failure as in other causes of enlarged liver. but there is generally tenderness. In this case all these signs were present. Curiously enough, the liver was the most obvious, being so much enlarged as to reach to the umbilicus. These three are really signs of the same pathological process at work. Owing to the heart failure the capillaries allow fluid to escape, probably because the slower circulation does not provide sufficient nourishment for the capillary cells, which get damaged and allow this œdema to develop.

Other organs are affected in cardiac failure. Post-mortem you are likely to find the kidney congested and swollen, and corresponding to that clinically you find in a good many cases signs of failure of kidney function, and albuminuria as was found in this patient. There was some tenderness in the splenic region, probably because the spleen was just enough enlarged to get down to the costal margin.

Clinical Condition on Admission.—Turning to the examination of his heart you see what the basis of all these signs and symptoms was. The heart was enlarged about 1½ in. to the left; I was not sure from the report whether it was also enlarged to the right, but probably it was. He had a very irregular rhythm, which was about 120–100 at the apex, though some beats were not coming through to the wrist. So that there you had the condition of auricular fibrillation. In most cases of this you will find mitral stenosis, but when the heart is very irregular, as it was in this young man, it is often difficult to make out any evidence of stenosis. There was, however, later a definite diastolic bruit and thrill, so that a diagnosis of mitral stenosis could be made with confidence.

Another important thing in his examination was that in addition to the enlargement of the heart there was definite precordial bulging, which only occurs when there has been heart disease for a long period. In his case there was no history as to when the heart disease started—nothing excepting his scarlet fever at six years. There has been some discussion as to whether scarlet fever can sometimes give rise to the same cardiac lesions that rheumatic fever does—especially mitral stenosis and attacks of auricular fibrillation. Probably that is not so. The way that mistakes arise is that a good many patients with scarlet fever get attacks of arthritis, and sometimes the arthritis is so typically rheumatic that the diagnosis is that they have scarlet fever and rheumatic fever. In other cases there is arthritis of an indefinite sort, and that is called scarlet-fever arthritis. But in all cases where heart disease follows, the evidence along other lines is very strong that mitral stenosis in children and young adults is always a rheumatic lesion.

Probably this patient who gave a history of scarlet fever really had rheumatic fever at the same time. Both these infections are through the tonsils, and both are probably streptococcal infections, and it seems reasonable to suppose that the one should predispose to the other. It cannot be proved that mitral stenosis in young people is always the result of rheumatic fever, but on the whole the evidence goes in that direction. The fact that this patient had precordial bulging means that the enlargement of the heart had lasted for some time.

It may be that there was some infection even before the scarlet fever at six years, and that the heart had been enlarged ever since then. Frequently there have been no cardiac symptoms at all with the original rheumatic infection, and it is five to twenty years later that they manifest themselves, and you find mitral stenosis, which has likely existed for a long period. So that in his case probably the first symptoms showed themselves at least sixteen years later, when he was 22. That is nearly always what you find in cases of auricular fibrillation, for the youngest patient I have seen was about 17. Cases of rheumatic fever are common from 3 to 4 years onwards, so that would allow twelve years for the development of fibrillation. Commonly, the period is fifteen or twenty years, and so you do not often see auricular fibrillation before 20 or 25 years of age. After that it becomes a very common lesion.

His Subsequent History.—As regards this patient's progress, he was a long time in the Hospital without very much improvement, probably because his pyrexia continued. So that there may have been a later rheumatic infection, or the pyrexia may have been in connection with his dental infection. Anyhow, it was not for two months that there was much change, and then the albuminuria disappeared with the œdema. The liver was still greatly enlarged, there was still fibrillation and he had some cough. When he

went out in September—he was over four months in hospital—there was no albuminuria, there was no œdema, and the heart was only out about half an inch instead of one-and-a-half inches. But he still had considerable shortness of breath when getting about and still had an enlarged liver.

Shortly after this I saw him for the first time at Out-Patients, and I was particularly interested in him because he was the first patient with auricular fibrillation whom I remember treating myself, and from whom I learned a great deal.

After those four months in hospital without complete recovery you would have thought that the prognosis was bad. But for four years after that he was driving a motor lorry all over the country, which is not very easy work. I shall talk later about the different ways in which you give digitalis for this condition. In his case he had Guy's pill, which contains digitalis leaves, and that seems to have suited him extraordinarily well. Sometimes it is said that no patient with fibrillation lives more than ten years, and in many cases that certainly gives a very generous estimate, especially judging from hospital patients who very often have to return to work which is too heavy for them. When the patient has once had auricular fibrillation it is generally a permanency (apart from quinidine treatment) for digitalis does not abolish it, but slows down the ventricular rate so much that it becomes less important as regards actual work.

You might say, how will the patient get on, because the pills which he had could not abolish the fibrillation? The pulse was never quite regular, but it was a slow pulse, 60 to 70, and he was able to carry on without any particular symptoms. Unfortunately, he thought he was getting on so well that about a year ago he stopped taking digitalis, and soon after the heart became much more irregular. For four or five weeks he got on fairly well; then he had a cerebral embolism with paralysis of the left side of the face, the left arm and the left leg. So that as all three were affected, and as he was not unconscious for any long period, the embolism affected the internal capsule and not the cortical part of the brain. If a cortical lesion is so widespread, there will be a long period of unconsciousness, or, more probably, no return of consciousness at all.

In his case the face recovered very quickly; it was least affected. The leg recovered in the course of a few weeks to the extent that it is quite useful, although it still shows signs of increased knee and ankle jerks and extensor plantar reflexes. These have continued, but he is able to walk about quite well and do what he wants as regards his leg. But, unfortunately, the arm seems to have suffered most, and has recovered very slightly; it is still spastic and has increased reflexes, and is not able to be used very much.

Since then, of course, he has come under treatment again, and his progress has been satisfactory as regards his heart, which is now in much the same condition as before. I am afraid the period of improvement of his arm has now come to an end, and he is going to be left with a paralysed arm. But here you see a patient who got on well for four years of hard work and then suffered a relapse which might have been avoided.

You want to realise that fibrillation is a condition which is well worth treating, and in which you can get good results. You want to express to your patient from the very beginning that it requires treatment for long periods and probably as long as he lives.

There are certain other points of interest in this case—the question of cerebral emboli and the question of treatment by digitalis or other drugs.

Cerebral Emboli in Heart Disease.—These are certainly more common in cases of auricular fibrillation, though you get them as well with regular rhythm in patients with mitral stenosis. By chance I have seen two other cerebral emboli in the last fortnight, both associated with mitral stenosis. Two of these three patients have had fibrillation, and one had a regular rhythm. You want, of course, to do everything possible to avoid such a serious occurrence because there are not very many cases in which you get complete recovery, though you certainly do get some.

I thought I would take those three people as illustrations to see what they were doing when the emboli occurred, and whether you can do anything to avoid it. One of them who was not fibrillating at the time had had heart disease for six or seven years, and it had not given rise to anything very serious except a little shortness of breath, as she had a light occupation. Then she began to get more shortness of breath and a little œdema of her feet, and came home to bed. She had a cough and a little expectoration as well. She was in bed about three weeks, and then felt much better and got up—I am not sure whether she got up on medical advice or not. About three hours after getting up she was sitting and talking when she had an embolism and was unconscious for a short period; when she recovered she had a complete hemiplegia. This is doing better than that in the patient I have told you about, but I should be surprised if it disappeared completely. Hers was a right-sided one, as is rather more common. You might think a detached piece of blood clot

more likely to go up the right side and produce a left-sided paralysis, but actually the others are the commoner. The reason it is less likely to go up the right carotid is that the main stream of blood goes round the aortic arch, but when it comes to the left it cannot go on straight, it must turn either down to the aorta or up the left carotid. This patient has had no other emboli at any time, and, curiously enough, this is often the case.

With regard to the patient that I am talking about specially to-day, although he has suffered from heart failure over a long period his embolism has been a single episode in his life.

The third patient had some definite warning before her cerebral embolism. I think, looking back, it is quite clear that she had a splenic embolism, because three or four days before her attack she was walking in the garden when she had an acute attack of pain in the left side, and when seen a week later the spleen was still palpable and tender. So that the warning probably was a splenic embolus. There was a second occasion, a few days afterwards, when she had a sudden attack of giddiness, which was unusual for her. It was a serious attack of giddiness, and she had to sit down for a considerable period before she could go home. As three days later she had a cerebral embolism producing paralysis of her face and arm, I think that possibly that was a cerebral embolism of some silent area.

Taking these three patients they do give you some indication of two ways in which embolism may be avoided. One is that a patient who has fibrillation ought to be treated with digitalis regularly. The other is that any patient who has obviously got signs of cardiac failure, or embolism, needs a long period of rest. If the first of these three had had three months in bed instead of three weeks probably she would have recovered without an embolism. The last patient had no signs of failure, but having been fortunate in being warned of her splenic embolism, if it had been diagnosed as that, then quite likely her cerebral embolism might have been prevented.

Treatment of Auricular Fibrillation.—If you get a patient with definite cardiac failure and severe signs of fibrillation, it is an urgent matter to give treatment at once. Under these conditions there are two methods of giving digitalis. First, if you like to give it in the same sort of dose that you give to an ordinary person, it would be 10 to 15 or 20 minims three times a day ; or you may give it in a massive dose, getting your maximum concentration in the body straight away.

If you take the second method you find that for an ordinary patient the dose works out at about 3 drs. Give that in your doses at about six hour intervals, giving half the dose the first time, a quarter next time, then one-sixth, and then one-twelfth. That is about the maximum dose it is safe to give a patient. The reason why you give it in that way is that the digitalis accumulates for some time and you do not get the maximum effect all at once. Having once got the maximum effect, the body takes a considerable time to excrete it. If you give the patient a massive dose, then cut him off digitalis for a week and see what the effect has been. The condition may be satisfactory and you may be able to establish him on a much smaller permanent dose of digitalis. If you start the patient with an ordinary dose you will soon find out whether he has any idiosyncrasy or particular liability to digitalis poisoning, and if he has then relatively small doses will not do any harm. Both these methods are very useful.

Strophanthin is not so good as a permanent method of treatment, and you will find that few people give it for a long period. If you give strophanthin intravenously before you give digitalis you often get a greater effect. But what you want to remember is that though digitalis is such excellent treatment for auricular fibrillation, it does not cure it, and the patient will probably continue to fibrillate indefinitely.

Recently another drug has been introduced. It has not had a very long test of clinical experience, as it was tried for the first time in 1918. I refer to quinidine. It has one great advantage—that in a certain number of cases it stops fibrillation altogether. If the patient has signs of cardiac failure you want to treat him with digitalis first and get him over his cardiac failure before trying quinidine. If there is great enlargement of the heart and old standing disease, you do not stand a very good chance of getting permanent results from quinidine. Leaving out those two groups—cases of cardiac failure, and cases of enlargement of the heart of long standing—all the others probably should be treated with quinidine. About half of them will get normal rhythm, and about half will not. The great advantage of quinidine in many of these cases is that it establishes normal rhythm, and that there is quite a good chance of its staying permanently. So that while digitalis has to be continued indefinitely, and the heart itself is continuing to deteriorate because the auricle is still fibrillating, quinidine can often be stopped when you get a normal thythm and a relatively slow deterioration of the heart muscle. Cases treated with quinidine require watching with the electrocardiogram, as sometimes the condition of auricular flutter is produced.

Clinical Associations of Auricular Fibrillation.—There are one or two general points that I want to refer to—for although it is a new name and its explanation is relatively recent—it is, of course, a very old condition. For a very long time it has been well recognised that in association with mitral stenosis you are particularly likely to get an irregular pulse of this type, a rhythm unequal in time and force and intermittent, because some beats do not come through. Though this has been known for a long time, yet if you read an excellent book like *Fagge's Medicine*, which is about forty years old, you do not find much attention was paid to it at that time. These disorders of rhythm do not then seem to have been recognised as so important and so common as they are now. It is an extremely frequent condition, for about half the patients who come into hospital for cardiac failure have auricular fibrillation. That is one point of great interest about it.

Why do certain patient's hearts fail with fibrillation and why do others fail with a normal rhythm? If you think of the people you have seen in the wards with cardiac failure, you will remember that in a large proportion of those with auricular fibrillation there was a definite history of rheumatic fever. It is true to say that nearly all cases of it really depend on old rheumatic infection.

One other common condition that I ought to mention in this connection is exophthalmic goitre, which often causes fibrillation. Apart from this, if you have a patient with fibrillation and you cannot find any signs of rheumatic infection, or any history of it, you should be very doubtful about your diagnosis, and wonder whether the condition has not some other cause. If you see children with rheumatic heart disease who have failure, they generally fail with normal rhythm. It seems to take a certain number of years before the heart muscle becomes affected in this way, and it is years after a rheumatic infection that you are likely to get auricular fibrillation. If a child has a rheumatic affection and cardiac failure when 10 or 12 years of age, it will probably have normal rhythm. In cardiac failure in lung conditions like chronic bronchitis, in high blood pressure, or syphilitic disease, which are three of the commonest causes predisposing to cardiac failure in older people—in all these cases, as a rule, you have got a normal rhythm and auricular fibrillation is rather unusual. There was one patient recently who illustrated that well—an old man with high blood pressure who had cardiac failure. There was no reason to suppose that he had mitral stenosis, and yet his pulse seemed to be quite irregular. He was tested with the polygraph, and was found to have a combination of extra systoles and pulsus alternans. That often gives you a good imitation of fibrillation.

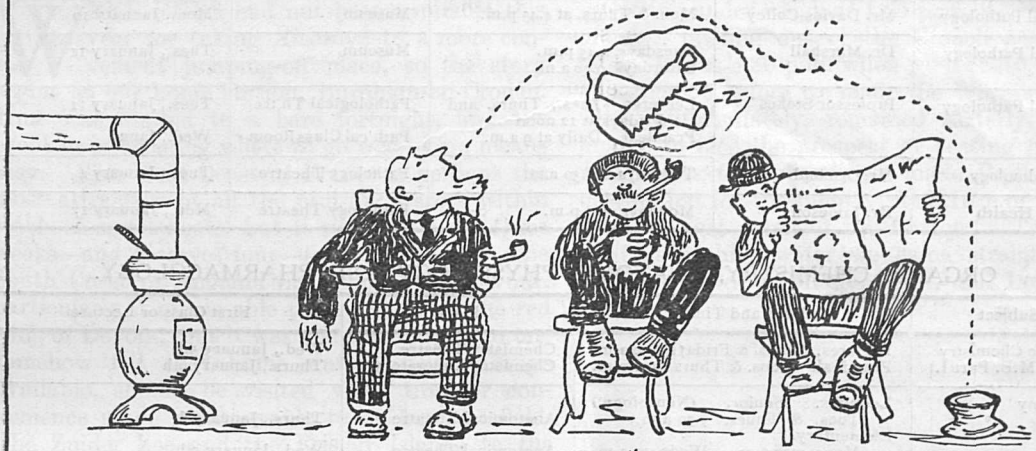
That brings me to the question of the diagnosis of auricular fibrillation. In most cases you have no difficulty about it; if you are in doubt at all, which you are in a number of small cases, much the most valuable test is to give the patient some slight exercise to do and see whether his pulse is better or worse after it. You have got to give sufficient exercise to take the pulse up to 120, as it is then that the test is valuable, because extra systoles are very uncommon in a heart that is going as frequently as that. The explanation is that of the various stimuli which can give rise to the heart-beat, whichever is most frequent will get control; the stimuli which are producing extra systoles occur more frequently than the normal rhythm of 70 or 80, but if you increase this to 120 it is more frequent than the stimulus giving rise to the extra systoles.

There was a very good example of this in a small boy I saw recently, about 13 years of age, with an extremely irregular pulse. His doctor and the clerks at the Out-Patients thought he had auricular fibrillation, and it was highly simulated in his case, as he had attacks of breathlessness which seemed due to his heart. But if he was made to run upstairs his pulse became absolutely regular, and therefore it was clear that you were not dealing with fibrillation. He had a combination of sinus arrhythmia and frequent extra systoles, and if you have the bad luck to have two conditions like that in the same patient, it is easy to make a mistake. Sometimes extra systoles alone, if they are frequent, will give rise to difficulty in diagnosis, but as a rule that will be solved by giving the patient exercise.

You will find a few cases in which you still fail. I saw one at Out-Patients last week, and I was not quite able to make up my mind, even after giving him exercise, whether he had got extra systoles or auricular fibrillation. There did seem to be a period immediately after stopping the exercise when it was very nearly regular, but some time after that it was still more irregular than before. The final test of the condition in all cases of doubt is the polygraph or electro-cardiograph, and by its use it was discovered that this irregular type of pulse occurred in connection with fibrillation of the auricle.

I had hoped to have had time to say more about these and about the changes actually taking place in the auricle when it is fibrillating, but have kept you too long, and must bring this lecture to a close.

AN AMERICAN'S CONCEPTION OF THE ENGLISH—



" A TYPICAL GROUP "—

FAVORITE SAYINGS THE ENGLISH THINK "WISE"— THE AMERICANS "OTHERWISE"

"BALLY" "BLOOMIN" "JOLLY WELL"

"CHEERIO" "OL' TOPPER"

THE MAKING OF A TYPICAL ENGLISH GENTLEMAN—

AND A KEEN SENSE OF HUMOR —

(SO KEEN,- THE AMERICANS CAN'T SEE IT)

S.H.T. 1926

GUY'S HOSPITAL MEDICAL SCHOOL.

TIME TABLE. SPRING TERM, 1927.

SUBJECTS FOR FINAL EXAMINATION. MEDICAL.

Subject	Lecturer	Days and Times	Place	First Class or Lecture
Surgical Pathology	Mr. Davies-Colley	Mon. & Thurs. at 4.45 p.m.	Museum	Mon., January 10
Medical Pathology	Dr. Marshall	Tuesdays, 4.45 p.m. Saturdays, 9.30 a.m.	Museum	Tues., January 11
General Pathology	Professor Stokes	Lectures. Tues., Thurs. and Fridays at 12 noon Practical. Daily at 9 a.m.	Pathological Th'tre Path'cal Class Room	Tues., January 11 Wed., Janua
Ophthalmology	Mr. Ormond	Tuesdays at 9.30 a.m.	Pathology Theatre	Tues., January 4
Public Health	Dr. Jameson	Mondays at 4 p.m.	Pathology Theatre	Mon., January 17

ORGANIC CHEMISTRY, ANATOMY, PHYSIOLOGY AND PHARMACOLOGY.

Subject	Days and Times	Place	First Class or Lecture
Organic Chemistry (2nd M.B. Part I.)	Lectures. Weds. & Fridays 9.30 a.m. Practical. Mons. & Thurs. 10-1 p.m.	Chemistry Theatre Chemistry Laboratory.	Wed., January 5th Thurs., January 6th
Anatomy	Lectures. Senior. (Neurology). Tues. & Thurs. 9.30 a.m. Elementary. Mons. 9.30 a.m. Weds. 11 a.m. Practical Anatomy. Daily from 9.30 a.m. to 5 p.m. Revision Classes. To be announced later Normal Histology. Tues. & Thurs. at 2 p.m.	Anatomical Theatre Anatomical Theatre Dissecting Room Demonstration Theatre Histology Laboratory	Thurs., January 6t Wed., January 5th Tues., January 4th To be announced later Thurs., January 6th
Physiology	Elementary Chemical Physiology. (All Junior Students.) Fri. 11-1 p.m. Sats. 10-12 noon Advanced Experimental Physiology. (Senior M.B. Students), Mons. & Weds., 11-1 p.m. Clinical Physiology. (All Students). Thurs 12-1 p.m.	Chemical Physiological Laboratory Experimental Physiological Laboratory Clinical Theatre	Fri., January 7th Wed. January 5th Thurs., January 6th
	Tutorial Classes, Elementary. (Junior Medical Students.) Advanced. (All Senior Medical Students.)	To be arranged at a General Meeting of Medical Students attending courses in Physiology, to be held in the Physiological Theatre on Wednesday, January 5th, at 10.30 a.m.	
Pharmacology	Mons. 4 p.m. Fridays. 1.15 p.m.	Physiological Theatre	Friday, January 14th

CHEMISTRY, PHYSICS AND BIOLOGY.

Course	Subject	Lectures	Place	Practical	Place
Pre-Medical Conjoint	Inorganic Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Thurs., Jan. 6th, 9.30 a.m.	Chemistry Theatre	Tues. & Thurs. 2-5 p.m. First Class, Thurs. Jan. 6th	Chemistry Laboratory
	Elementary Organic Chemistry	Tues. & Thurs. 2 p.m. First Lecture, Tues. Jan. 11th	Chemistry Theatre		
	Physics	Tues. & Thurs. 10.50 a.m. and Tues. 12 noon. First Lecture, Thurs., Jan. 6th	Class Room IV.	Mons. 10-1 p.m. and 2-5 p.m. First Class, Mon. Jan. 10th	Physics Laboratory
Conjoint	Biology	Weds. 9.30, Thurs. 12 noon, Fridays 9.30 a.m. First Lecture, Thurs. Jan. 6th	Anatomical Theatre	Mons. & Fridays 2-4 p.m. First Class, Fri. Jan. 7th	Biology Laboratory
M.B. London	Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Thurs. Jan. 6th	Chemistry Theatre	Mons. 10-1 p.m., Tues. 2-5 p.m. First Class, Tues. Jan. 4th	Chemistry Laboratory
	Physics	Tues. & Thurs. 10.50 a.m., and Tues. 12 noon. First Lecture, Thurs. Jan. 6th	Class Room IV.	Thurs. & Fridays 2-5 p.m. First Class, Thurs. Jan. 6th	Physics Laboratory
	Biology	Weds. 9.30 a.m., Thurs. 12 noon, Fridays, 9.30 a.m. First Lecture, Thurs. Jan. 6th	Anatomical Theatre	Weds. & Fridays 10-1 p.m. & Sats. 11-1 p.m. First Class, Fri. Jan. 7th	Biology Laboratory

A Cruise to the Schelde in a 5-Tonner.

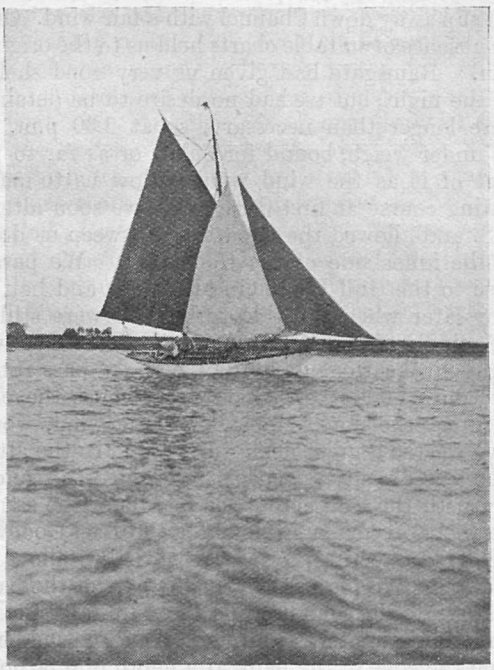
Modified from a Log which was awarded the "Bengorm" and "Stubbs" Challenge Cups for 1926 by the Royal Corinthian Yacht Club, who have kindly consented to the publication of this narrative.

By E. H. ROCHE.

WEEK-ENDS had not been available this year for taking *Albatross* to a more convenient jumping-off place, so the story begins at our home station, Burnham-on-Crouch. Time was limited to a bare fortnight, and the problem of deciding where to go was by no means easy. The West Coast of France is perhaps the most attractive of all the cruising waters within reach of small boats, but it needs at least three weeks—and deserves four—to do it justice. The South Coast of England has much in its favour, particularly if one is able to get as far as the red cliffs of Devon; but it was not new to us, and one somehow felt that home waters, being always available, should be visited when time or convenience made it impossible to go farther afield. The Zuider Zee and the Frisian Islands to the North always call strongly across the North Sea, but, again, it seemed that our time was too short, and we could not hope in a fortnight to get much farther than we went last year. It is moreover a long and exposed passage from the Wadden to the Coast of England, and we did not want to take the risk of being held up by bad weather and failing to get home on the appointed day. So we turned at last to our old friend the Schelde, and as we had never been more than a few miles above Flushing we decided to explore the whole Schelde —East and West—including, if possible, a visit to Antwerp, 50 miles from the sea.

Tupling and Wood made up the crew this year —as tough a trio of medical students as anyone could wish to encounter upon the high seas. Wood and I spent the greater part of July 15th renewing sheets and halyards and generally making the good ship seaworthy, and at 11.15 a.m. on Friday the 16th Tupling joined us. By 1 p.m. all preparations were made. The glass was steady at 30.27 but wind and tide were not in our favour, the former being due easterly and the latter at the second hour of the flood. But the boat was ready and we were burning to put to sea. So we decided to get under weigh at once, and to beat out to the Whitaker, where we hoped with a change of wind to lay a course upon Flushing. Failing that, we could either run up on the ebb tide to Pin Mill or across the Thames estuary to Ramsgate, Dover or Calais.

Getting under weigh at 1.20 p.m., we made slow progress beating out of the Crouch against the tide. It was 4.30 p.m. when we reached Foulness and about 6 before we made the Whitaker. The wind, unfortunately, remained easterly, and so, unable to face the prospect of beating the whole way across to Holland, we made Ramsgate our destination for the night. At 8.15 p.m. we fixed position, just north of the Barrow. Taking advantage of high water we came straight across the East Barrow, Middle Sunk, and Long Sand,



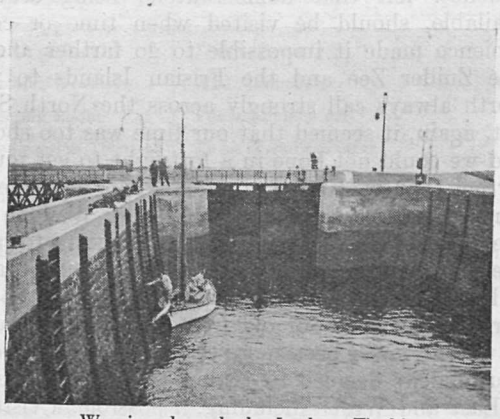
"Albatross" Under Weigh.

following a straight course S.E.$\frac{3}{4}$E. from the N.E. Middle buoy to Fisherman's Gat. Feeling our way with the lead through the Gat and then southwards along the edge of the Long Sand, we picked up the Edinburgh and Tongue Lightships, and later entered the red sector of the North Foreland. Steering south till we were abreast of the Foreland, then S.E. by E. down the coast, keeping about a mile distant from it, we found ourselves abreast of Ramsgate at 1 a.m. We then gybed and headed W.N.W. through the Old Cud Channel

for the harbour entrance. The tide was flowing. None of us had ever been to Ramsgate before and we found it difficult in the pitch dark to find the entrance, which is very narrow and partly hidden from the sea. But we followed the leading lights and when it seemed that if we held on another minute we must crash into a stone wall an opening miraculously appeared and we shot through, hugging the north-east pier to counteract the sweep of the tide. We had scarcely passed through the entrance when we were met by a representative of the harbour master, who proceeded very kindly to assist us to a berth and then very firmly to levy the appropriate dues. At 1.30 a.m. we turned in.

July 17th

It was a beautifully fine day, with a high steady glass. The wind was light and still dead foul E.N.E. It appeared so settled in that quarter that we were seriously tempted to abandon the Schelde and slip away down Channel with a fair wind. Only the absence of suitable charts held us to the original plan. Ramsgate had given us very good shelter for the night, but we had no desire to be detained there longer than necessary, so at 2.30 p.m. we got under weigh, bound for Calais or as far to the East of it as the wind would allow us to make. Setting course at first S.E. by E. we soon altered to S. and allowed the flood tide to sweep us down on the inner side of the Goodwins. We passed close to the Gull Lightship at 4 p.m., and half an hour later when the tide turned we were still in the middle of the Downs, with the East Goodwin Lightship bearing E. by S. $\frac{1}{2}$ S. To pass round the south end of the Goodwins against the ebb, or round the north end against the wind, would have wasted a great deal of time, and as the afternoon was already far spent we decided to feel our way with the lead across the middle of the sands. We therefore made straight for the East Goodwin Lightship, steering S.E. by E. $\frac{1}{2}$ E. to allow for tideway. We found that on this part of the bank at any rate the soundings on the Admiralty Charts were approximately accurate. We came suddenly upon the edge of the bank at a depth of 5 fathoms (high water), and thereafter the bottom shelved very gradually until we reached a strip about 100 yards wide where it shelved rapidly to 2 fathoms and then suddenly disappeared out of soundings. There was a considerable tide bauble and much noise over the narrow strip of bank, but there were no actual breakers. At 5.50 p.m. we fixed position just N.E. of the East Goodwin Lightship and streamed log reading 44.8. We were just able to set a course S.E. by E., and hoped with luck aided by six hours of ebb tide to make Dunkirk. In view of the probability of an all-night sail we divided up the night and what remained of the day into watches. The afternoon passed very pleasantly, but the wind was too light to drive us across and 8 p.m. found us on the tail of the Sandettie Bank, a mile S.E. by S. of the lightship. We held on our course S.E. by E., the tide still carrying us N.E. by E. At 11 p.m. we were one mile south of the Ruytingen Lightship, and there we found the tide beginning definitely to flood. Giving up all hope of making Dunkirk until the next tide we decided to anchor for six hours on the first bank we could reach. The wind falling light we missed the Inner Ruytingen and were swept a long way to the south-west by the tide and just managed to find the tail of the Inner Ratel, where we anchored in 4 fathoms. At 12 midnight we turned in for a few hours sleep while the flood tide spent its strength. It was not a particularly pleasant berth and we rolled considerably, but were grateful for what rest it afforded.



Warping through the Lock at Flushing.

Sunday, July 18th

We turned out at 3.15 a.m. to find a cold dark morning with a wet mist hanging heavily upon the water and the decks drenched with dew. The Dover Stream was then almost slack. The barometer had risen to 31 and the wind had veered slightly to S.E. by E. As to ourselves we were ravenous and did not grudge the time spent upon a good substantial breakfast.

We got under weigh at 4.15 a.m. and set course E. by N. on the starboard tack. With the ebb tide under us we made good progress in spite of a very light wind. At 6.30 a.m. it seemed advisable to go about and head S. by E. so as to cross the more shallow banks while there was yet sufficient water upon them. The wind continued to fall away and progress became very slow, but we managed to get into the Dunkirk Road an hour

before low water and by 9.45 a.m., when the tide began to flood, we were just opposite Zuidcoste. At 10.30, being no longer able to make way against the stream, we ran in to the shore and came to anchor in 4½ fathoms north of the Sanatorium. During the remaining five hours of the flood we lay comfortably at anchor and made good our arrears of nutrition and sleep. The grey misty morning had turned into a magnificent day and we bathed and baked in the sun.

We got our anchor immediately the tide became slack at 3.40 p.m. There was a slight breeze from S.E. and we set course E. by N. along the coast. The glass had been falling steadily all day, but the weather did not yet show any signs of change. At 6.30 p.m. we were abreast Nieuport with the glass still falling, and at 8.20 the weather began to assume a more threatening aspect. The wind freshened considerably and the glass began to fall rapidly (29.88). The sky became overcast and the air had a peculiar warm musty smell like damp hay. At 9 p.m. we were abreast of Ostend. The wind was continuing to freshen from E.S.E. to such an extent that we were no longer comfortable under full mainsail. The glass was 29.83 and falling rapidly. There remained only one hour of east going stream and the wind was slightly foul for Zeebrugge. So, all things considered, we decided to put in to Ostend and await the change of weather in a sheltered berth. The wind being foul we had to beat into the harbour, a manœuvre which is not devoid of difficulty and some danger owing to the tide that sweeps across and the blanketing effect of the piers and high buildings in the vicinity. With every stitch of canvas set we managed to keep sufficient way to avoid the risk of missing stays and, giving the east pier a wide berth, made the entrance without mishap and ran up the east arm of the harbour. We finally anchored at 10 p.m. in a cul de sac in front of the Yacht Club.

Once or twice during the night one was dimly aware of a howling wind in the rigging and pelting rain on the cabin top, and on one occasion I was definitely wakened by a terrific peal of thunder overhead. Apart from that I slept solidly through it all. By morning the rain was over and the sky clear, but the wind was still strong from S.W. Bar. 29.83.

High water Dover was at 6.45 p.m., summer time. High water Ostend would therefore be at 8 p.m. and the Dover Stream in the offing would turn to the east at 5 p.m.

So with the greater part of the day before us we spent the morning and early afternoon ashore, and were well pleased with our few hours in Ostend.

The water front looked very attractive. The wind was still fresh from S.W. but by the afternoon the sea was comparatively calm. The rate of exchange was strongly in our favour (204 francs to the £) and we therefore took the opportunity of laying in a store of provisions. Burdened with parcels we hired a horse and trap in the Market Square and drove to the Yacht Club in style, very much to our own amusement. Arriving on board at 5 p.m. we got under weigh with as little delay as possible. The wind was becoming lighter and in the harbour there was so little wind that we actually had to sweep out between the piers. It was a fine afternoon with a bright sun and the sky was clear except for small fluffy white clouds which seemed to suggest wind. We were clear of the harbour by 5.30 and with boom well out to port sailed E.N.E. along the coast. The breeze gradually freshened a little, sending us forward in fine style, and it was not long before the white beacon on the end of the Mole at Zeebrugge and the white top of the Mole itself showed up in the bright afternoon sun. It was just a few miles beyond Ostend that a misguided pigeon flew across the boat and, striking one of our shrouds, fell into the water. With hearts overflowing with compassion we put about with intent to rescue the poor creature. But our motive was misinterpreted, for at our approach he suddenly recovered consciousness and flew with great vigour and desperation for the shore. We were abreast of Zeebrugge at 8 p.m. and very soon after that the tall crane at Flushing came into view. This crane, remotely resembling a giant grasshopper in a field of stubble, is an exceedingly good landmark, being visible from the sea for a distance of about 20 miles. We entered the Schelde at 9 p.m. and held our course across the river for Flushing. At 9.30 we passed close to a buoy and observed that the tide was still flooding. At 10 o'clock it had just begun to ebb. High water Flushing was at 8.40, and it was interesting therefore to note—in confirmation of our observations last year—that the tide in the mouth of the river definitely continued to flow for 1¼ hours after the highest level at Flushing had been reached.

It was raining heavily when we arrived in the outer harbour of Flushing at 11 p.m. We came to anchor near the lock. The night was very dark and all Flushing had gone to bed and it was not without difficulty that we succeeded in knocking up the lock keeper. Having warped through the lock we explored the canal in the dinghy. Eventually we took to the sweeps and made our way round into the first basin on the starboard hand. It was impossible to see at all clearly in the pitch dark, and there were many and various ships

occupying the berths. So we came to anchor in 4 fathoms near the end of the basin. Finally, we turned in after hot cocoa at 1.30 a.m. The glass was still falling, 29.65.

The morning of Tuesday, July 20th, was ushered in by a steady downpour of rain and a strong wind from N.W. After a few hours the rain cleared and we went ashore. Flushing was celebrating its annual fair and the business of the town seemed almost completely suspended, while merry-go-rounds and swings of every description occupied the Market Square and obstructed the main streets. We went early to the Post Office where, among other things, we were glad to find two Dutch charts of the Schelde awaiting us. We went to the water front, felt the true strength of the wind, watched the wild sea that was running and the breakers on the banks and were well content to be ashore. The rest of the day we spent riding on the swings and roundabouts and wandering without much purpose or satisfaction about the streets of Flushing.

(To be Continued.)

Hospital Information, etc.

Papers by Guy's Men.

G. B. Dowling, M.D. Two Cases (1) Muscular Atrophy of Syphilitic Origin; (2) Lichen Nitidus, Confluent Type.—Proc. Roy. Soc. Med., xx., 1926, 91, Sec. of Dermat., p. 21.

H. W. Barber, M.B. Case of Lichen Spinulosus.—*Ibid.*, 98, Sec. of Dermat., p. 28.

E. P. Poulton, M.D., F.R.C.P. Treatment of Raymond's Disease.—*Lancet,* 1926, ii., p. 1282.

Change of Address.

F. Marsh, Esq., M.B., B.S., c/o A.P.O.C., Musjid-.-Sulieman, via Ahwaz, Persian Gulf.

W. E. Berwick, 223, Upper Richmond Rd., Putney, S.W.15.

Vernon E. Lloyd, 28, Devonshire Place, Upper Wimpole Street, W.1. 'Phone: Mayfair 3647.

J. Wiseman, 186, Amhurst Road, Dalston, E.8. 'Phone: Clissold 2033.

J. G. Kingsbury, M.R.C.S., L.R.C.P., The Bungalow, Monkton, Heathfield, Taunton, Somerset.

F. T. Harrington, 25, Northumberland Sq., North Shields.

H. J. Selby, Welland Lodge, Prestbury Rd., Cheltenham.

N. L. Lloyd, c/o Dr. Gray, 9, Westerhall, Weymouth.

H. C. C. Taylor, 29, Mutley Plain, Plymouth.

J. Gray, Kolar, nr. Bangalore, Mysore, S. India.

W. Mark Brown, 389, Papanui Rd., Christchurch, New Zealand.

Walter Charles Hancock.

IN the Anatomical Theatre, on Friday, the 17th December, in the presence of many of his friends, "Doc" Hancock was presented with a cheque for £280 16s. 9d. and a cake basket, as a mark of the high regard with which he has always been held by the Staff and Students of this Hospital. Mr. C. H. Fagge took the chair in the unavoidable absence of Sir Alfred Fripp. Letters of apology for absence were received from Sir Alfred Fripp, Mr. E. C. Hughes, Mr. Slesinger, Prof. Gibson, Dr. F. W. Reckett, Mr. Lane-Roberts, Dr. J. M. H. Campbell, Dr. Blake Odgers and Mr. L. Bromley.

Professor Johnston, in an admirable speech, said:—

Mr. Chairman and Gentlemen,—The history of a great hospital like ours is rich in names of great men; men who have won world-wide fame, and whose names we cherish and venerate. But fame does not come to all men, neither do all men seek to achieve it. But there is another group of names which bulks largely in our history, names of men like Teddy Cock, men who were beloved in their time and of their generation, whose lives of sacrifice have done much to maintain and enhance the tradition that has been handed down to us.

It is to a place in this group that Walter Charles Hancock, to whom we are to-day offering our thanks and our good wishes, can rightly lay a claim, for he has, during his long period of service to the School, won for himself an enviable place in the affections of all Guy's men.

When he came to Guy's in 1890, more than thirty-six years ago, Hancock had already seen a bit of life and learnt a thing or two. Whilst Sir Alfred Fripp, who should have been our Chairman, was fighting Guy's battles on the football field, Hancock was fighting England's battles in the sandy deserts of Egypt, and you can be quite sure that it was good, honest fighting, as far as he was concerned. It was there that he acquired the military habit of obeying orders and of seeing that orders were obeyed, for in the short space of 6 years he rose to the rank of Colour-Sergeant, a rank which corresponds to a Company Sergeant-Major nowadays. It must have been while in the army that Hancock learned what to see and what not to see. There have been occasions when he has had to report some breach

of discipline, but far oftener than not he has been unable to supply the name of the culprit. Either it was too dark to see properly, or else he came on the scene just as the culprit vanished from it.

The 75th Regiment of the Line, which Hancock joined, had originally been the Gordon Highlanders, but, for political reasons it had been deprived of the kilt and had lost its identity. Fortunately, during Hancock's period of soldiering, the sentence was lifted. The Regiment became the 1st Battalion of the Gordon Highlanders and resumed the long-lost glory of the kilt, but, in case the Southerners, of whom it was then largely composed, should appear on parade improperly dressed, experts were hurried down from the north to instruct the troops in the correct method of wearing their new apparel.

In Egypt, Hancock served with the Gordon Relief Force, and it was while on patrol duty in the desert that he had the enviable experience of arresting and detaining no less a personage than the late Lord Kitchener, then Major Kitchener. He, as you are probably aware, spoke Arabic like a native and he could get himself up like one too. On this occasion he was off in his war paint to discover the plans and projects of the enemy. But Hancock didn't like the look of him and promptly put him under arrest and marched him into camp, where the necessary explanations were made to the commanding officer.

After leaving the Army and before coming to Guy's, Hancock served the Great Northern Hospital for a time, and there came into contact with Sir James Galloway, Jonathan Hutchinson and other well known men in the medical profession. So when he came to Guy's, in 1890, Hancock was no raw hand. At the Great Northern he had missed no opportunity of exploring the post-mortem room, and he had already begun to find his way about the human body.

The late Mr. Dunn was the Senior Demonstrator when Hancock joined Guy's, and a better or more loyal Guy's man never lived, and it must have been from him that Hancock learnt to appreciate a fact that he has never forgotten, that it is the students who are the really important people about the place and that the essential duty of every officer of the School is to help them to the best of his ability. First of all, he discovered that the old tank room was a very good imitation of the Augæan Stable. Dirt and untidiness have always been abhorrent to him, and so he set to work to put matters right. That done, he started to teach himself anatomy and he at once appreciated what some men never learn that there is only one method, careful and thorough dissecting.

We at Guy's are rightly proud of the wonderful wax models of Towne, we marvel at his skill and his amazing industry. But Hancock's work, in a different way, has reached just as high a pitch of excellence. What patience, what skill, what ingenuity and what enthusiasm he brought to it. Never a wasted minute in all those 36 years. His routine duties finished, he always turned to his special hobby of dissecting, unless there was some fogged student to help or some beginner to initiate into the art. Long after the students had gone in the evening, Hancock would sit on over some strange and usually very unpromising-looking piece of material that he had rescued from the Operative Surgery Room. What hours he spent over it, and what a wonderful specimen he would turn out at the end of it. Many, I am glad to say, are preserved in the Specimen Room, but many more served their purpose for some years in demonstrations, until some young and overstrung demonstrator irretrievably destroyed them. Hancock never grudged them, for he realised that one good specimen that a man can handle for himself is worth 10 permanently preserved ones. But he has his treasures. I have been at Guy's for more than seven years and I haven't yet seen all of them. Every now and then I find a specimen laid out for some class that I haven't seen before and I believe we shall find a caché of them somewhere in the future.

Such enthusiasm as his is infectious, and I see many men here to-day who must be conscious that they owe him a debt of gratitude on that account.

As he worked in the old department and rubbed shoulders daily with the staff and the students, he rapidly absorbed the atmosphere of Guy's and became, what he will ever remain, one of the proudest and loyalist of all her sons. Every phase of hospital life interested him. No Rugger match is really official unless he is present—and it takes a great deal to keep him from Honor Oak Park when there is a match on there. No tug-of-war is satisfactory, unless Hancock is the umpire and indeed there is no

branch of the Clubs' Union in which he is not actively interested. In recent years, he has become the President of that secret body which scours the country for miles around London at week-ends and rejoices in the nameless appellation of the G.H. Innominate Society.

Now it almost invariably happens that as a man grows older, he tends to rest on his oars for spells that gradually increase in length. I have known Professors of Anatomy who haven't been inside their own dissecting rooms for years before they retired, and indeed it is a common experience in all walks of life and is probably a physiological phenomenon.

But Hancock has been a striking exception. This last term has found him just as efficient and just as indefatigable as ever he was. A few month ago, with a certain amount of uncertain assistance, he undertook a number of dissections. These we utilised recently at the 2nd Examination for the B.D.S. degree. I am uncertain whether the candidates appreciated their beauties or not, but my co-examiner said afterwards that he would like to meet Hancock for, in more than 30 years of anatomical work, he had never seen a body so well preserved, and so well dissected.

The truth of the matter is that, although he has grown older in years, his spirit remains that of a young man. And one of the secrets of his perennial youth has been his complete imperturbability. During the years I have known him, I have never once seen him ruffled or put out of temper. If the roof were to fall in on top of us now, Hancock's first instinct would be to clear the debris and put up a temporary roof and he would waste no time or words about it.

His sincerity is such, that you will not misunderstand me when I say that you could never tell from Hancock's manner whether he were addressing a first year student or a senior member of the staff.

I should like, if you will allow me to do so, to read you a few brief extracts from typical letters received by Mr. Brooke from old Guy's men in response to his invitation to them to contribute to the testimonial which I am about to present. [Here Professor Johnston read many cordial letters of appreciation from old Guy's men living in all parts of the world.]

These letters are far more convincing than any words of mine. They show what a good influence Hancock has always exerted by the example of his industry, his helpfulness and his personality, and they indicate how warm is the feeling towards him in the hearts of Guy's men scattered all over the world.

With such a record of long and valuable service, and of devoted and unswerving loyalty to the School, Hancock may well look back with pardonable pride on the active years of his life. And the pain which the coming severance from old associations must cause him will, we hope, be softened by the memory of this gathering of Guy's men, and whose presence here to-day is a tribute, a real and striking tribute, to the place which he has won for himself in our esteem and in our affections.

In the names of all these friends of yours whom you see here to-day, and in the names of all those friends who are scattered throughout the world, I have the pleasant duty to perform of handing to you this cheque and this silver cake basket as a token of the esteem in which they hold you, and the affection which they bear towards you, and I wish Mrs. Hancock and yourself very many happy years of peaceful retirement in your new home.

Hancock's reply was characteristic, and it is difficult to record faithfully its tone, but all who know "Doc" will have many memories to fill in the gaps. He wished to thank everybody for all the kind things they had done and the way they had spoken of him, but he felt as did the man who listened to a wireless concert for the first time, that it was "all untrue."

It had been his privilege during his time at Guy's to meet and make friends with more students than he could count, and he had the unique joy of having friends in every part of the world, ninety-nine per cent. of whom were Guy's men. He took with him to his new home in the country the happiest memories of having served under as fine a series of "chiefs" as any one could wish.

On an occasion such as this, he found it very difficult to say all the things he felt, he would therefore repeat most sincerely, his thanks for the cheque and the cake basket, and for the many happy days he had spent at the Hospital.

Correspondence.

Thanks.

DEAR SIR,—May I crave space in your GAZETTE to express my best thanks to all Guy's men (past and present) who subscribed to my Testimonial Fund, and who were unable to be present on December 17th. On that occasion I tried (very inadequately) to express the gratitude which Mrs. Hancock and myself feel for your generous gifts and for the many kind words which were said by the Chairman and Professor Johnston.

I have received many very kind letters from Guy's men in all parts of the world, which are very much appreciated, and take this opportunity of thanking them all.

I shall carry with me into my retirement many pleasant memories of the 37 years happy work at Guy's, and shall not fail to take the liveliest interest in all that concerns the dear old Hospital —whether in work or sport.

Wishing all Members, past and present, a very happy New Year.

Yours faithfully,
W. C. HANCOCK.

Medical School,
Guy's Hospital.
December 24th, 1926.

Influenza.

To the Right Honourable,
NEVILLE CHAMBERLAIN, M.P.,
Minister of Health,
Whitehall, London, S.W.1.

Right Honourable Sir,

I am recovering from a serious attack of Influenza. While suffering from it I made a remarkable and important discovery; which would have been impossible had I not previously given many years to Physics (and Combustion).

My discovery is that Influenza is incipient combustion.

When fuel absorbs oxygen with sufficient rapidity there is combustion. An animal absorbs it with only sufficient rapidity to produce animal heat, but if the rapidity be increased there is a very painful incipient combustion, known as Influenza.

The immediate cause of the pain of Influenza is a tension (produced by the absorption of oxygen) reacting on the flesh of the patient.

Speaking from my experience as a patient, I can say quite definitely that:—

A patient should avoid exposure to the heat of the sun or to the heat of a fire.

In bed the limbs should be prevented as much as possible from touching one another. Occasionally a great deal of pain can be prevented by stretching them into the cold parts of the bed.

Warm blankets can be removed and replaced by cold ones. I once found great relief by having my warm bed removed, leaving me on a mattress.

This experience (especially the relief from keeping the limbs apart) supports the view that Influenza is similar to Combustion.

I think the rapidity of the absorption of the oxygen partly depends on the chemical constituents of the blood, and partly on the temperature of the patient.

In my own case there was probably an increased affinity due to a practice I had of sweetening my food to excess. This I have discontinued.

I remain,
Rt. Honourable Sir,
Your most obedient Servant,
JOHN P. MOSS,
"Bena Vista," Lyndhurst, Hants.
November 19th, 1926.

IIa 116175/26

[We received recently the above letter addressed to the GAZETTE Office.

(We wonder whether Mr. John P. Moss has enclosed the wrong letter to us and whether the Minister of Health has received a letter notifying, possibly, a change of address.—Ed.)]

University of London.

SIR,—The connection between Guy's Hospital and the University of London is necessary and honourable. I yield to none in my respect for its examinations and its professors, in spite of the fact that my earliest relation to one of the latter was as assistant in an attempted burglary, at his instigation, of his mother's larder. But that was 25 years ago, long before he came to Guy's.

With all respect, however, I cannot consent to the assumption, contained in Passim, and elsewhere, that we as a Hospital, belong to the University of London.

Unless conditions have changed greatly in the last 15 years, the majority of our students have no intention of applying for its degrees. Some are members of other Universities, more are candidates for the diplomas of the Royal Colleges.

It is this cool assumption of possession, with its implication that the majority of students are either negligible or present on sufferance, that keeps alive that opposition to which you refer in your comments on Dr. Fawcett's letter

Let it be recognised that only a part of the Hospital is a part of the University, let the tail cease to try to wag the dog, and more support will be forthcoming for the worthy objects supported by Dr. Fawcett,—Yours faithfully,

BEND SABLE.

Denholm,
Chingford, Essex.
18th December, 1926.

Nursing News.

AT the meeting of the Court of Committees of Guy's Hospital on Monday, December 13th, 1926, it was announced that the Matron, Miss Margaret Hogg, C.B.E., would retire from the service of the Hospital on March 27th, 1927.

The Court of Committees appointed Miss Emily MacManus, R.R.C., Matron of the Bristol Royal Infirmary, to be Matron of Guy's Hospital from March 27th, 1927, to fill the vacancy caused by the retirement of Miss Margaret Hogg.

Miss Margaret Hogg, C.B.E., entered Guy's Hospital in 1905, and completed her training on July 21st, 1908.

She subsequently joined the Guy's Hospital Institution Private Nursing Staff, and from 1908 until 1914 acted as Night Sister and Sister in Queen Victoria Ward, Guy's Hospital.

In March, 1914, she was appointed Assistant Matron, and acted in this capacity until November, 1916.

On the sudden illness of Miss L. V. Haughton in November, 1916, she was appointed Acting Matron, and in February, 1917, she was appointed Matron of the Hospital.

During the war Miss Margaret Hogg was appointed Principal Matron, T.A.N.S., 4th London General Hospital, and the honour of Commander of the Order of the British Empire was conferred upon her in 1917.

Miss Margaret Hogg is at present serving on the following Committees and Councils :

Q.A.I.M.N.S. Nursing Board ;
Voluntary Advisory Nursing Board, H.M. Prison, Holloway ;
Council of the College of Nursing, Ltd. ;
The National Council of Nurses of Great Britain ;
Royal National Pension for Nurses ;
Nurses' Insurance Society ;
Julius S. Morgan Benevolent Fund ;
Nation's Fund for Nurses ;
Edith Cavell Homes of Rest for Nurses ;
Council of the Cowdray Club ;
Joint Advisory Committee for the International Course for Nurse Administrators and Teachers in Schools of Nursing, etc.

Miss Emily E. P. MacManus entered Guy's Hospital in July, 1908, and completed her training in December, 1911.

She subsequently became Sister at the Kasrael Aini Hospital, Cairo, in 1912, and practised private nursing in Cairo from 1912 to 1913.

She acted as Holiday Sister at Guy's Hospital for three months in 1913, and afterwards became Theatre Sister in King's Lynn Hospital until May, 1914.

In May, 1914, she returned to Guy's Hospital as Sister of Astley Cooper Ward, and on August 9th, 1915, became Staff Nurse in the Civil Hospital Reserve in France, where she remained, first as Nurse and then as Sister, until December, 1918. She was mentioned in dispatches in November, 1917, and was subsequently awarded the decoration of the R.R.C.

In March, 1919, she was appointed Assistant Secretary to the College of Nursing, and in May, 1919, was appointed Assistant Matron to Guy's Hospital, which post she held until May, 1922.

Nurses Hockey Club

AT a meeting of the Nurses' Representative Council last year it was suggested that a Hockey Club should be formed. Matron gave consent, and a club was started at the beginning of the season. Several matches have been played, and many fixtures arranged for next year. Our only drawback is that we have been unable to obtain the use of a field for regular weekly practice. All efforts are being made to secure a suitable one. As soon as we get over this difficulty we hope to raise our standard of play and eventually be able to produce a strong 1st and 2nd XI.

Matches Played

Oct. 27	*v.*	Massage Students	Lost
Oct. 30	*v.*	Avery Hill	Lost
Nov. 13	*v.*	Carshalton	Scratched
Nov. 24	*v.*	Massage Students	Scratched

Reviews.

Principles of Diagnosis and Treatment in Heart Affections. By Sir JAMES MACKENZIE and JAMES ORR. Third edition. Published by Oxford Medical Publications. *Price* 7*s.* 6*d.*

The Heart. By ALEXANDER GEORGE GIBSON. First edition. Published by Oxford University Press. *Price* 5*s.*

Modern Methods in Heart Disease. By F. HEATHERLEY. Second edition. Published by Messrs. Baillière, Tindall & Cox, Ltd. *Price* 8*s.* 6*d.*

THE object of the first of the three books mentioned above is stated in the preface to be to "present the recent advances of cardiology in a form that could by understood by the general practitioner, and, if possible, to describe the more important phenomena in such a way that they could be recognised by the trained senses of the observer."

That the book has, in considerable measure succeeded in this aim is witnessed by the fact that in the ten years that have elapsed since its first publication, it has passed into three editions, the first edition having undergone four impressions.

The idea which is most vividly obtained after reading the book is that before the time of Sir James Mackenzie, the layman who based his estimate of the gravity of a given case of heart disease on how breathless the sufferer became on walking upstairs, was much nearer the mark than the medical man who listened with knitted brows to the patient's heart through a stethoscope, or who stood with portentous demeanour by the bedside feeling the patient's pulse.

Sir James Mackenzie, however, assures us repeatedly—the repetition, in fact, becomes at times somewhat tedious—that the medical profession before his time held views with regard to cardiac disease that were not only erroneous, but pernicious. His predecessors, he states, used to condemn all sufferers from cardiac murmurs, and all persons of all ages exhibiting irregularities of the pulse, to lives of permanent inactivity or even of invalidism.

It was Sir James Mackenzie who first distinguished the types of murmur and of irregularity that carried a serious prognosis from those that carried a good prognosis; and he was the first to advance the idea that the prognosis, whether good or bad, depended eventually on a single factor—the condition of the heart muscle. The degree of impairment of the heart muscle is revealed by the degree of breathlessness induced by exertion. This is a symptom, of course, which leaps to the senses of the least initiated. The prognosis given on this basis by the least sophisticated yokel was therefore more likely to prove accurate than that of the most eminent Harley Street physician, however elaborate his stethoscope, and however impressive his appearance.

According to Sir James Mackenzie, "The purpose of a patient in consulting a doctor is to find out what bearing his complaint has on his future." It might perhaps be more strictly accurate to state that he visits the doctor with the object of being cured. Since this limited purpose is rarely if ever fulfilled for patients suffering from heart disease, Sir James's generalisation unquestionably holds good in the sphere in which he has specialised. And it is essentially to the question of prognosis that this book is devoted.

The book is divided into 4 parts, containing in all 28 chapters. The construction of the book has been completely altered in this last edition, so as to conform with the conceptions of disease and of the symptoms of disease reached by Sir James Mackenzie before his death. These conceptions have been advanced already by him in his "Basis of Vital Activity," reviewed in the GAZETTE of March 13th, 1926.

Sir James's views with regard to the nature of the symptoms of disease are capable of summarisation in the following propositions—

1. The functional activity of an organ is regulated and controlled by structures other than its own cells.

2. When the function of an organ is disturbed by disease, the source of the disturbance must be sought for in a failure of this regulating structure other than the organ itself.

3. This failure of the regulating structure reveals itself in a disturbance of a reflex arc of which the organ attacked by disease and the structure which regulates its activity are component elements.

4. This disturbance of the reflex arc causes symptoms of disease in the organ under consideration, which symptoms are the product of three processes, namely, (1) increased activity of the organ, (2) decreased activity thereof, and (3) arrested or ill-regulated activity thereof.

Consideration, even when prolonged, of these propositions does not convey that sense of illumination which the process of formulating them has brought to Sir James Mackenzie. Their gist, however, as indicated by the text of his books, is that disease of an organ is explained, and the symptoms of the disease are classified, in terms of the disturbance of some structure which, by inference, *must* form part of a reflex arc which controls the function of the organ under consideration.

Disease of an organ is explained in terms of disturbance of an organ other than itself which regulates its function.

In the book under review, Sir James Mackenzie deals with disturbances of the heart on the lines above indicated. Thus sinus arrhythmia takes origin in fluctuations in activity of the sino-auricular node. Auricular fibrillation results from the sino-auricular node being thrown out of action altogether. So does auricular flutter. Extra systoles and paroxysmal tachycardia are caused by the hyper-excitability of other centres in the "genetic" (i.e., conducting) system of the heart. Pulsus alternans is now explained in terms of a disturbance, not of the heart-muscle itself, but of some part of the genetic system, probably the auriculo-ventricular node or some part of the intra-ventricular genetic system. In the case of the heart, the structures other than the muscle cells themselves which regulate the activity of the muscle cells are the component parts of the "genetic system."

It is more or less obvious that when an organ begins to suffer from any disease, all its metabolic functions suffer. Thus, oxygenation of the tissue of the organ is impaired, the tissue is less effectively ridded of its excretory products, its nervous control is adversely affected, and the anabolic processes of tissue

repair are hindered. To the medical man pre-occupied with the heart, or lungs, or blood, the first process is of primary importance; to the person obsessed by the kidneys, the second process is the prominent characteristic of the disease; to him for whom the nerve, brain and cord are the most outstanding structures of the body, the third process is the essential one; by those pre-occupied with the alimentary function, the last-mentioned process is the one seized upon as crucial.

It thus depends on our bias in favour of one physiological system or process in preference to the other systems, as to which particular physiological disturbance occurring in disease we regard as causal. By Sir James Mackenzie the disturbance of nervous control is regarded as causal. It is undoubtedly true that when a tissue or structure becomes diseased, its nervous control suffers. But this is not to say that the disturbance of nervous control is the *cause* of the disease. The question seems to turn on what is meant by the word "*cause*," a question too little pondered on by medical men.

But it would appear that Sir James Mackenzie's attitude towards this hypothesis of the nature of disease is still tentative. Thus, this book is divided into four parts which are given the following headlines: Heart Failure; Affections of the Regulating Mechanism of the Heart; Affections of the Heart other than those of the regulating mechanism; Prognosis and Treatment. Under the heading of affections of the heart other than those of the regulating mechanism are considered cardiac murmurs, affections of the myocardium, acute affections of the heart and arterial pressure.

It seems to the reviewer evident that at the time of his death Sir James Mackenzie was in doubt as to how far his explanation of disease in terms of disturbance of a regulating structure and of a reflex arc was capable of being pushed. It seems from the classification of this book that he hesitated to apply this explanation to cardiac murmurs, myocarditis, acute carditis and hyperpiesis. It would seem best, therefore, to regard this hypothesis as one which is more likely to prove of value in cases of derangement of function of organs that are highly innervated than of diseases of organs whose activities depend rather upon chemical stimulation.

Omissions which we cannot help regretting in this book are of any mention whatever of the effort syndrome, or of congenital heart disease.

The second of the three books above quoted —that by Dr. Gibson—belongs to a series of which we are informed by the publishers that the purpose consists in providing a short resumé of the fundamental principles of the subjects with which they deal. They are, we are told in no sense to be regarded as text-books, but are intended to give a general survey, on broad lines, of the various branches of medical science, and of their relation to each other. In his preface Dr. Gibson states that he has written the book for three classes of readers, namely for students, to be read in conjunction with a text-book of medicine, for practitioners, who desire to review the cardio-vascular system in the light of modern work, and thirdly, for an intelligent lay public.

To the reviewer it seems that Dr. Gibson's book will prove of little value for the first two classes of readers, and will prove far too technical for the third class. It consists of a hundred pages and eight chapters, including a bibliography. The presentation of the subject matter is formal and academic—highly reminiscent, in fact, of the familiar text-book style. The author rarely illustrates a point he makes from cases in his experience, though Dr. Gibson has had ample opportunities of observing the effects of violent bodily exertion upon the heart in his practice at Oxford. Thus, it seems hardly worth while to take, in a book of this size, four pages to inform either the student or the practitioner or, for that matter, the general public that heart muscle possesses the properties of excitability, contractility, rhythmicity, conductivity and tonicity. On the other hand it would have been emphatically worth the author's while to have stated what he considered the indications for the use of strophanthus and quinidine. The book is illustrated by some pulse and other tracings, and by some very indifferent drawings of pathological conditions in the heart. There are very few medical topics upon which books can be written that appeal simultaneously to medical men and to the lay public. The subject of cardiology is certainly not one of them.

In conspicuous contrast to the above work is Dr. Francis Heatherley's book. It is the

longest, the most expensive, the least pretentious, and, in our opinion, the most helpful of the three. Dr. Heatherley is at pains to contrast what he calls the old and new schools of cardiology. And since the view is attributed to the new school that the knowledge derived by graphic methods can be put to practical use without having recourse either to the electro-cardiograph or the polygraph, the reader will search the book for charts and tracings in vain. In Dr. Heatherley's preface it is stated that the book is written in order to familiarise the general practitioner, who cannot carry an electro-cardiograph about with him and who cannot be bothered with a polygraph, with the modern views of heart disease. This purpose it seems to us that the book fulfils admirably. We would even go further than Dr. Heatherley and suggest an extension of his public so as to include, as well as the general practitioner, the student.

The book consists of seven chapters the headings of which are, with the exception of the first, usual enough. The first chapter is called "The Old and the New Schools," and is written from the point of view of one who has been a follower of the old school for twenty-five years spent in general practice. First, the author expounds at some length the points of divergence which exist between these schools. This is perhaps the most interesting chapter. The book is attractively produced by the publishers, and is printed in type that is large and readable. The style is colloquial, and Dr. Heatherley interleaves his information with anecdotes and reminiscences which, better than anything else, create a picture in the student's mind and fix his memory. The book is full of those hints as to the handling of patients and as to treatment which the general practitioner is perhaps alone properly qualified to give. But it suffers from the shortcoming that it is rather carelessly written. Dr. Heatherley writes in extremely short paragraphs consisting frequently of but a single sentence. These paragraphs tend to have little relation to each other, so that the style seems in places disjointed and inconsecutive. There results in the reader's mind a certain incoherence of impression. This could easily and profitably be remedied in the third edition into which the book will almost certainly run.

For no apparent reason, the book ends with a list of interesting books, most of which have no relation to cardiology. In selecting some of these books for recommendation the author seems to us to have undertaxed his powers of critical discrimination.

We recommend the book both to the student and the general practitioner.

The Diagnosis and Treatment of Venereal Diseases in General Practice. By Colonel L. W. HARRISON. Published by Oxford Medical Publications. *Price* 25*s*.

SINCE the intensive introduction of efficient venereal clinics throughout the country there is little doubt that cases with penile discharge and sores, presenting themselves to the average G.P., are despatched with promptitude to the nearest clinic for both investigation and treatment.

With this easy shifting of responsibility, and consequent lack of stimulus and practice, the medical man is apt to forget what little he knew on the subject of venereal diseases. The perusal of this book would stimulate the practitioner and bring his knowledge up to date again.

Colonel Harrison's style is concise and clear; so much so that it gives us an up-to-date book, which, despite the fact that it is on one of the specialties, nevertheless, remains easy reading, intelligible, and instructive from cover to cover.

The book contains many valuable tips which are the outcome of a large practical experience. For the student there is a balanced resumé of the more important new tests and remedies.

Considering the recent abundant and enthusiastic American literature on the subject of intravenous mercurochrome in the treatment of gonorrhœa, the author's reference to this is singularly short and non-committal.

The illustrations are good, but few, surely, can claim originality. We have the impression of having seen the same photos and coloured plates in dozens of other books—but this slight criticism can in no way detract from the merits of such an excellent book.

Operative Surgery. Three Parts. Fourth Edition. By C. R. WHITTAKER, F.R.C.S. Edin., F.R.S.E. Catechism Series. Published by Messrs. E. & S. Livingstone, Edinburgh. *Price* 1*s*. 6*d*. each part. Post 2*d*. each.

THESE three small volumes constitute the fourth edition of the work and are arranged in the well-known "Catechism" style of question and answer. The first volume is devoted largely to the ligatures and arteries. Blood transfusion is described, but one would

like to see incorporated in this section a brief note on the method of grouping.

Amputations and operations on the head and neck are dealt with in the second volume, while the third is devoted almost entirely to the surgery of the abdomen. In the latter volume the excellent plan of giving a brief, but sufficient account of the anatomy and lymphatic drainage of the various viscera, is followed. This, however, is not done in the case of the breast in part one.

It is a pity that after-treatment cannot be indicated briefly. Six different types of operation for "idiopathic aneurysm" are described, and, in one of these types five different operations are described. Surely all this is not necessary, and if one or two cuts on these lines were made a little after-treatment might be included.

The volumes really *do* fit into the pocket; they are exceedingly readable and contain a few well-chosen illustrations. They are confidently recommended to the student for they contain all that one is likely to remember after having read a larger book.

Sport.

Rugby.

Guy's v. Aberavon.

WE are not winning our matches, but going very near it, and remembering always the strength of the teams opposed to us, it is something in the nature of a great achievement to run these big teams so close. The scores in this match at Aberavon were level until almost the last minute, when they scored the try that put paid to our account.

Earlier on Davies, of Aberavon, had scored and Williams had converted. W. D. G. Jones, playing in the threequarter line, gained the try for the Hospital and J. Durr added the extra points. Neither side could gain further advantage till the closing minute, then as stated we just failed to maintain the level score.

It is all the more creditable that Cameron and his men did so well, as neither Schabort nor Popplewell could make the journey. The forwards were splendid, the threequarter line was much strengthened by Jones' inclusion, and T. O. Garland made a very welcome re-appearance.

Result.—Aberavon, 1 goal 1 try (8 points); Guy's, 1 goal (5 points).

Guy's Team.—V. G. Boyle; F. Wilkinson, W. D. G. Jones, F. H. B. Spence, G. R. Mostert; T. O. Garland, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. Durr, J. H. Richmond, A. Clarke, A. Simpson-Smith, C. D. Malone, D. S. Clogg.

Guy's v. Newport.

THIS match, a new fixture, was played on Thursday, December 2nd, at Newport. We were fortunate in being able to field a good side, although J. W. Schabort found it impossible to make the journey.

Our own ground is called names, often the opposite of complimentary; it is difficult to find a name for Newport's pitch on this particular occasion. There was a wonderful exhibition of football considering the conditions—the pace excellent and the passing accurate. Scarcely had play commenced before Garland dropped a goal. Following this our backs had a fine bout of passing which culminated in Mostert going over in the corner for a very fine try. Newport now took a turn, Bailey going over after Scott had made the running. Everson kicked a wonderful goal. One point divided the teams, but our backs put in another good run and Mostert again scored. Just before half-time Stock, of Newport, made a fine individual effort and scored. We led by 9 points to 8 at the interval, but unfortunately this ended our scoring.

Everson kicked a penalty goal for the Welshmen; and then we had a rather severe set back, Newport putting on two more tries. During this later portion of the game we scarcely maintained the attacking spirit of the earlier play. Still the team did well to make the long journey to Newport and run so powerful a Club to a very even game for at least three parts of the play.

T. O. Garland played his best game; he was kicked in the throat during the play, but pluckily played on. The backs showed more spirit than usual for most of the game and handled remarkably well. The forwards carried out a heavy afternoon's work with credit, though one or two scarcely lasted the full period.

Result.—Newport, 1 placed goal 1 penalty goal 3 tries (17 points); Guy's, 1 penalty goal and 2 tries (9 points).

Guy's Team.—V. G. Boyle; F. Wilkinson, W. D. G. Jones, F. H. B. Spence, G. R. Mostert; T. O. Garland, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. Durr, J. R. F. Popplewell, J. H. Richmond, D. S. Clogg, C. D. Malone, A. R. Clarke.

Guy's v. Richmond.

A VERY fine match was this, played at Honor Oak Park, on Saturday, December 4th. Though the ground was heavy, the pace kept up was tremendous, and no man cried "easy" till the final whistle.

It was a successful kick at goal that won the game, and the success was Richmond's. J. Durr, who tried to convert the try he gained, made a first-rate attempt, but the ball swept just outside the post, whereas, the try by H. MacVicker, of Richmond, was goaled by R. A. Barr.

The Richmond forwards have been for many seasons a formidable pack, and this season they are as good as ever. F. W. R. Douglas, W. C. T. Eyres, D. Turquand-Young, W. H. Considine make up a quartette of excellence, and the remaining four are not far behind. These started off at a rare pace and our men had to defend. Backs and forwards went down to it manfully and the tackling has improved out of all understanding. Bear in mind that only on the previous Thursday a hard match had been played at Newport by our team. It was not till just on half-time that Richmond scored their try.

The second half our pack played up well and were better than Richmond as the game wore on; quite early J. Durr got his try and from then on the struggle for further points was keen. We got possession much more frequently than Richmond thanks to the hooking of W. H. Myburgh. The backs, however, were very slow, the ball passing at the standstill, and neither wingman had much chance, though earlier Mostert had a couple of opportunities, but developed that predilection for cross-kicking which so often fails to bring tries. One could not criticise Wilkinson, playing out of position; he is really a wingman. He cut out a couple of good openings, once with Clarke unmarked outside him he passed inwards, which lost a try (probably some one inside called for the ball), and on the second occasion Wilkinson's pass was not accepted.

Tremendously keen was the play towards the end, and the ball was worked frequently to either goal line, where the struggles for an opening were gallantly foiled. It was hard, clean football. Both full backs added to their reputations and both Captains did their utmost to keep their men going at full steam. Defence, however, stood and the game ended: Richmond 1 goal (5 points), Guy's 1 try (3 points).

T. O. Garland was unable to play for us, and it should be mentioned that W. D. G. Jones, who took his place at scrum half, played with a very stiff knee, owing to an injury at Newport. His was a very plucky exhibition.

Major S. McK. Saunders, an old Guy's Captain and lately returned from the East, came to witness the match.

Guy's Team.—V. G. Boyle; G. R. Mostert, F. H. B. Spence, F. J. Wilkinson, G. J. Clarke; W. D. G. Jones, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. Durr, J. W. Schabort, J. R. F. Popplewell, J. H. Richmond, A. Clarke, A. Simpson-Smith.

Association.

1st Round of University Challenge Cup. Guy's v. East London College.

ON Wednesday, December 8th, the 1st XI. met East London College at the latter's ground at Leyton in the 1st round of the University of London Challenge Cup, the result being a win for the Hospital by 5 goals to 1.

The game itself was an exhibition of clean sportsmanlike football, and this, combined with the beautiful handling of the game by the referee, made the match delightful to watch.

In the first ten minutes of the game it looked as though we were going no further than the first round, for our opponents as a whole were speedy, had good ball-control, and made good use of their opportunities. Guy's, however, soon pulling together, got going and were the first to score, L. S. Williams, who incidentally gained all five of our goals, scor-

ing from a mêlée in front of goal. A few minutes later we scored our second goal, followed closely by one for East London College; and so the score remained at half-time.

On resuming, East London College were pressing hard and were unlucky not to score again, but for the last quarter of an hour of the game their goal was in constant danger; another three goals were added, and had not the shooting been erratic our score would have been increased still further.

The team played well, White, Williams and Couch being well up to their usual standard.

It was unfortunate that Blaikley was unable to play owing to illness, but we sincerely hope that he will be fit for the 2nd round, which takes place at Honor Oak Park some time in February, when we meet Battersea Polytechnic.

Fencing.

ON Wednesday, December 8th, the Hospital team went up to Cambridge for the first fencing fixture with the University. It was a very cold day and a still colder journey, which facts may have had something to do with the size of the defeat we suffered, but the main cause was the excellent play of our opponents.

A. Lloyd, the 'Varsity skipper, and winner of the Doyne Cup, 1925—1926, was unbeaten and unbeatable at foil, and N. Garrus was excellent with the sabre. The latter, we hope, will be down at Guy's next season, and should strengthen the team.

E. L. Monkhouse was away from the team at the epée competition. Both Johnson and Scorer were very much off their form in sabre, while even the coldest of weather does not seem to effect F. S. C. Pritchard. Pitts did better in foil than is apparent by the results, but could not gain the winning points because his repostés are slow.

Result.—Cambridge University, 4 defeats: Guy's, 22 defeats; 1 Coupe double.

Foils—

C. H. Johnson, won 0, lost 3.
S. A. Scorer, won 1, lost 2.
T. B. Pitts, won 0, lost 3.

Epée—

P. A. Gorer, won 1, lost 2.
T. B. Pitts, won 0, lost 3.
C. H. Johnson, won 1, lost 1, coupe double 1.

Sabre—

C. H. Johnson, won 0, lost 3.
S. A. Scorer, won 0, lost 3.
F. S. C. Pritchard, won 1, lost 2.

P. A. Gorer and E. L. Monkhouse entered for the Epée Competition, held at Salle Bertrand, between Tuesday, 7th December, and Friday, 10th December. P. A. Gorer qualified on Tuesday for the semi-final on Thursday, but on Wednesday E. L. Monkhouse was unlucky.

On Thursday, Gorer, with one of his too-few flashes of brilliance with the epée, headed his pool and so qualified for the final. Unhappily, on the following day he was unable to find his form until the last three fights which he won. He is to be congratulated on obtaining sixth place, especially as competent judges have said that the standard of fighting was much higher than the average since the war.

Hockey.

1st XI v. Reigate.

THE Hospital played very well to beat Reigate 4—2 on Saturday, December 4th. The forwards played a fast and bustling game and were well supported by the halves.

King in goal effected some brilliant saves.

The goals were scored by Archer (3), and Camps.

Guy's v. Kingston Grammar School.

ON Wednesday, December 8th, Guy's beat Kingston Grammar School 8—1, but owing to the fact that several members missed the way and consequently delayed the start there was hardly enough play seen to report, dusk decending early in the second half.

Half-time score, 6—1.

1st XI v. Rochester.

ON Saturday, December 11th, Guy's played Rochester at Elmer's End. It was a ding-dong struggle until, 15 minutes from the start, L. Catchpole broke through and scored a characteristic goal. Soon after, Wood added another, and at half-time the score was 2—0.

The play in the second half was uneventful, both sides finding the heavy ground very tiring. No goals were scored.

This was a particularly fine achievement, as Guy's were without five of their regular team, who were playing for the United Hospitals.

Guy's Team.—B. A. Moss, M. F. Awdry, F. R. Hayward, R. A. Sykes, C. N. Howitt, G. N. Carrell, E. T. Conybeare, G. C. Campbell, K. B. Wood, L. Catchpole, H. O. Lyne.

1st XI v. R.M.C. Camberley.

WITH a weakened team Guy's did very well to beat R.M.C. Sandhurst, at Camberley, on December 15th, by the decisive score of 6—2.

Both teams made a good start and the game gave promise of a keen struggle. After a very even first half the score was 2—1 in our favour.

In the second half the opposing team showed lack of staying power and Guy's scored 4 well-deserved goals to 1 scored against them.

Of the 6 goals, Archer scored 5 and Lyne 1.

Guy's Team.—J. T. Edmunds, G. N. Carrell, J. R. Hayward, C. N. Howitt, J. E. Willett, R. A. Sykes, P. S. Turner, A. H. Curtis, C. A. W. Archer, R. Catchpole, H. O. Lyne.

2nd XI v. Streatham.

ON Saturday, December 11th, the 2nd XI. visited Streatham and beat them 4—3, after an enjoyable game in spite of being one man short. C. L. Stevens scored the first goal for the Hospital, followed a few minutes later by an excellent goal from the edge of the circle by Holgate.

Half-time score 2—1.

In the second half, Streatham scored two more goals, but Duchesne equalised, and just before the final whistle Edmunds scored to give Guy's the lead.

The team as a whole played well, co-operation between the forwards and the backs being decidedly better.

Guy's Team.—C. S. Henderson, K. E. Lane, E. N. Stevens, S. W. Wright, P. S. Turner, W. S. Larcombe, R. L. Duchesne, R. C. Hill, G. T. Edmunds, W. Holgate, C. L. Stevens.

United Hospitals Hare & Hounds.

THE U.H.H. & H. have moved from West Wickham to Hayes. The first run from the new headquarters will be on Wednesday, January 5th, at 3 o'clock. A suitable train leaves London Bridge (S.E. upper level) at 2.5 p.m. (change at Elmer's End).

It is hoped that any Guy's man, who wants to take some exercise on Wednesday afternoon, will avail himself of the new headquarters, which are lent to the Hospitals by the Blackheath Harriers and have just been done up by them at considerable expense, so that they now constitute the finest changing accommodation of any Cross-Country Club.

The race for the Inter-Hospitals Cup will be on March 9th, over a course of 7 miles. If some of our more experienced runners will come down fairly regularly before then we shall stand a very good chance of winning back the Cup, which we lost last year for the first time since the war.

U. H. H. & H. v. South London Harriers "A."

THIS match was held on December 1st, at Coulsdon over a course of $5\frac{1}{4}$ miles, and resulted in a win for the S.L.H. by 17 points to 38.

The going was very heavy, especially across the ploughed fields, which were badly flooded.

L. A. Pool and E. P. Railton, who are regular runners in the S.L.H. first team, led from the start, followed by J. S. Horsley. Soon, however, the latter was overtaken by D. I. Pain and A. S. Evans, who ran together for the rest of the course, to finish up equal third, three minutes behind Pool and Railton, who were equal first.

The Hospitals were without their two best runners, J. F. Varley and R. G. Macbeth.

The final order was as follows:—

1. L. A. Pool (S.L.H.), and E. P. Railton (S.L.H.), 32 mins. 42 secs.
3. D. I. Pain (S.L.H.) and A. S. Evans (S.L.H.), 35 mins. 38 secs.
5. J. S. Horsley (London), 35 mins. 59 secs.
6. P. A. Forsyth (Thomas'), 36 mins. 59 secs.
7. R. B. Dorrington (S.L.H.), 37 mins. 18 secs
8. G. W. May (London), 38 mins. 16 secs.
9. M. P. Way (Guy's), 39 mins. 25 secs.
10. W. S. Pitt-Payne (Guy's), 39mins. 49secs.
11. P. W. Dorrington (S.L.H.), 40 mins. 15 secs.
12. L. H. Mazotti (S.L.H.), 40mins. 43secs.
13. S. C. Brown (Guy's), 41 mins. 34 secs.

The first five men on each side finishing count in team placings.

Result.—

1. South London Harriers, 1, 2, 3, 4, 7 =17 points.
2. United Hospitals, 5, 6, 8, 9, 10, = 38 points.

Birth.

LEVISEUR.—On November 19th, 1926, at Waterkloof, Pretoria, to Beryl, wife of E. A. Leviseur, M.B., B.S., a daughter.

EDS. { P.F.S.C. G.M.H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *January 15th, 1927.* *Number 1004*

PASSIM

THIS number is largely filled with glowing accounts of Ward Concerts, and is therefore in the nature of an echo of a Christmas week that was an outstandingly pleasant one, brought to a fitting termination by the Nurses' Dance, held in the Home on New Year's Eve. We have seldom attended a dance characterised by so much unaffected enjoyment to which the great variety of very attractive fancy dresses worn by the Nurses added in no small measure. Twelve o'clock, and the New Year came all too quickly.

WE publish, on another page, a letter deprecating to some extent the fact that the Ward Concerts are tending to become elaborate affairs, visited by many persons having little connection with the Hospital, and causing inconvenience to patients who are really ill. It is stated that the people who come to these concerts are well able to afford payment if they wish to hear the efforts of such artists as come particularly to give pleasure to those who are patients.

We think this is a somewhat severe criticism; patients who are sufficiently unwell not to be able to enjoy entertainment are invariably placed in a part of the Ward where they are disturbed as little as possible and are subjected to the minimum of discomfort.

We have no statistics as to the types of visitors who come to these concerts, but we believe that they are, more often than not, people who are, or who have been, actively interested in the Hospital, and that their primary interest is not so much in the actual entertainment as in the novelty and associations.

We agree that local talent is much more to be desired than outside professional talent, and that the efforts of "Doctors" known to the patients are undeniably much more appreciated, but it is by no means easy to collect an adequate supply of musicians and persons able to provide entertainment from those actually at the Hospital. We agree, too, that the task and expense of providing tea for hordes of visitors is perhaps undesirable, and suggest that the numbers could be limited by personal invitations from the Sisters of the Wards.

SIR GILBERT WILLS, Bart., a Governor of the Hospital, has written to the Treasurer to inform him that he has increased his donation of £5,000 to the Bicentenary Fund of the Hospital to £50,000 for the specific purpose of increasing the accommodation and completely remodelling, in accordance with present-day requirements, the Out-Patient and Casualty Departments.

This munificent benefaction has been received with the utmost gratitude by the Governors of the Hospital, as the Out-Patient Department is at the present time much over-crowded and the accommodation available is quite inadequate for that thorough investigation into the diseases of Out-Patients which is essential if the treatment of the patients is to keep abreast of all the recent advances in science, medicine and surgery.

It is not the first great benefaction which the School or the Hospital has received from the Wills' family. As long ago as 1902 Sir Gilbert Wills' father, Sir Frederick Wills, himself a Governor of the Hospital, furnished and equipped the Library which bears his name in the Medical School, and this Library was opened by Sir Frederick Wills in 1902.

Sir Gilbert Wills, realising that the Out-Patient Department is the key of the Hospital and that portion of the Institution which represents the Hospital to a great majority of those patients who seek its assistance, decided that the Out-Patient

Department should be worthy of the Hospital, and should afford to the Medical Staff of the Hospital the opportunity of doing their work in comfort and with every facility for their investigations.

The site which has been chosen by the Governors for the extension of the Out-Patient Department immediately adjoins the existing Surgery, Throat and Ear, Ophthalmic and Dental Out-Patient Departments, and extends from Maze Pond at the corner opposite the *Miller of Mansfield* along Newcomen Street to the Day Nursery, adjoining the Salomons Infant Welfare Centre. The freehold has been for many years the property of the Governors, and all that is required, before the extension of the Out-Patient Department can be put in hand, is to clear the site of its tenants. Under the Rent Restriction Act these tenants cannot be disposed of until equivalent accommodation has been obtained for them elsewhere, and in this connection the Governors of the Hospital are seeking the good offices of the County Council in order to obtain accommodation for the Newcomen Street tenants in connection with any Housing Scheme that the County Council may have in hand either in Bermondsey or Southwark. The Governors feel that they have every justification to ask for the good offices of the County Council in this matter, as the disposition of the tenants in Newcomen Street is to the advantage solely of the inhabitants of the Boroughs of Bermondsey and Southwark, who, above all, rely upon the Hospital for assistance in sickness and distress.

A Committee has already been appointed by the Staff and School Committee of the Governors, consisting of the Governors and representatives of those members of the Staff who work in the Out-Patient Department, and a start has already been made in scheduling the requirements of the various Out-Patient Departments with a view to the preparation of draft plans for the reorganisation of the Out-Patient Department, which will include not only the provision of accommodation for certain Departments which are now very overcrowded, but will also involve the consideration of the provision of more adequate Radiographic Departments and the reorganisation and renovation of the Dispensary.

▭

We offer our very best congratulations to Mr. G. F. Gibberd and to Mr. W. R. Spurrell on their recent success in the M.S. examination. That the only two names in the Pass List should be those of Guy's men is an achievement of which we are justly proud.

The following have been appointed "Clinicals" for the period from January 15th to April 15th: Messrs. S. L. H. Clarke, E. T. Clifton, S. C. H. Lane, C. B. Picken, W. H. Post, J. H. Turner.

Mr. J. B. R. Hern, M.B., B.Ch., has been appointed Medical Registrar vice Mr. W. H. Craib, who has taken up the position as Assistant to the Medical Unit at University College Hospital.

▭

It is with regret that we announce that Sister Surgery (Miss Dorothy Griffith) is leaving the Hospital on the 22nd of this month to take a well-earned holiday before her marriage to Mr. W. R. Spurrell, which is to take place in the middle of the year.

The position of Sister in the Surgery is a very exacting and trying one, sufficiently so to fray the most mellow of tempers. All who have worked in the Surgery will know that in spite of this Miss Griffith has always been good-naturedly tactful and ever helpful. She takes with her our very best wishes.

Miss D. Matthews (Sister Children's Ward) is succeeding Miss Griffith.

▭

We remark with pleasure that Dr. John Dixon, who was born on September 10th, 1832, and is the oldest Guy's man alive, was recently installed as Master of the Southwark Mark Lodge, and offer to him our heartiest felicitations. Dr. Dixon is not infrequently seen about the Hospital, and we feel certain that his youthful spirit will carry him through many more years of interest.

▭

Arrangements have been made by the Guy's Hospital Rifle Association for miniature shooting on Thursday evenings, 5.30 to 9.30, at the Cripplegate Institute, Golden Lane. The Institute is five minutes' walk down Fore Street, which turns out of Moorgate Street immediately before the Underground Station. Further details will be published in the next Gazette and also placed on the Notice Board in the Colonnade.

▭

We have been asked to comment on a small publication by the National Union of Students entitled *A Guide to Library Facilities and Printed Services of Bibliographical Information*, price 3*d*.

and we have printed elsewhere the letter accompanying this small pamphlet. It seems to us that this guide must be invaluable to anyone engaged in research in the literature of any subject whatsoever, as it indicates briefly and clearly where the principal libraries are to be found and the mode of gaining entrance to each. It also provides a list of the chief guides to libraries. It may be obtained from The National Union of Students, 3, Endsleigh Street, W.C.1.

THE 1927 *Directory of Guy's Men* has recently been published, and all subscribers to the GAZETTE should by now have received their copies. Non-subscribers may obtain a copy on the receipt at the GAZETTE Office of 2*s*. 6*d*.

WE should like to remind our readers that the annual subscriptions to the GAZETTE are now due, and should be forwarded to the Manager, the GAZETTE Office.

Ward Concerts.

The Children's Party.

THE lot has fallen upon me to commiserate with all those who, for one reason or another, were unable to be at the Children's Party, held in Astley-Cooper and Lydia Wards on the Tuesday after Christmas.

Some, undoubtedly, were drawn away by the promise of better things in other places, but nowhere could there have been more laughter and enjoyment than in these two wards.

Comparisons are always odious, and we will have none of them, and although the Christmas Tree was a great attraction in Lydia, yet the sight of great bunches of balloons floating heavenwards in Astley-Cooper filled the hearts of many with joyful anticipation. From 2.30 onwards flocks of round-eyed children trooped in from all parts of the Hospital, and were duly packed in rows in Lydia, where the Punch and Judy show took place.

This was—as always—received with yells of delight, and the criticisms and advice flung from the audience showed well the interest with which it was received.

After an hour or so of more or less continuous laughter the notion of tea appealed to most people pretty strongly, and all capable were pressed into service.

Tea was a serious business, for there were a multitude of highly-coloured cakes and many and divers-coloured buns to be devoured, all very pleasing to the infant eye, but—let us say no more.

Refreshed, satisfied and even gorged the hordes searched round for amusement until Father Christmas should appear.

And what should catch the roving eye but many multi-coloured balloons. This was too tempting, and forthwith followed a right royal battle—

> For those from Luke cried fore,
> And those from Astley back.
> And none was found to hold the door,
> Or stem the children back.

Finally, most people managed to get a balloon, and there was a steady flow back to Lydia to get a good place before Father Christmas arrived.

The troops from Naaman set the standard, arranging themselves in a soldierlike manner, but in no whit were the hordes from the Baby Ward to be beaten, and they, after their kind, behaved most ladylike.

Now came the most exciting part of the afternoon: When was Father Christmas going to arrive, and would he remember everybody? Father Christmas, in the person of Mr. Northfield, did arrive at last, coming in through the window, and heralded by Mr. Ettles upon a hastily improvised gong.

We have always believed Mr. Ettles to be a respecter of persons, but we have grave doubts as to whether he is any respecter of property—judging from his efforts with a tea tray!

Father Christmas appeared to be but little more decrepit than usual, his eye no less dim (but perhaps this was partly because he had forgotten to bring his horn rimmed spectacles), and his thin, frail voice quavered much in his accustomed fashion.

Weighed down by the load in his sack he hobbled up to the tree and said that he had come a long way.

This statement was accepted, but he did not say that he had been delayed by the snow or that one of his reindeer had slipped a cartilage and so made him late—this was felt to be a grave omission.

However, he proceeded to business, assisted by Sister Lydia, and his faint failing voice filled each small heart with joy as his or her name was called out.

There was something for everybody; truly, this Father Christmas had a wonderful memory for presents. Mr. Steward had a duck, which he took away with him but did not have it for dinner;

Mr. Parsons had a big whistle, 'cos he's a big, big man; Mr. Cann a small one, 'cos he's a wee, wee man, and now we shall never be able to find either of them, because they will be playing *Over the Hills and Far Away* together.

Then there was Freddie George. He got a bottle full of funny smelling stuff—it might have been scent, but I don't think it was! Freddie's on the war path now, because he thinks some doggy person had a paw in it. Bonzo's, BEWARE!

Having finished with the presents Father Christmas gathered himself together and departed in a brisk fashion—we suspect a call.

Then arose Mr. Ettles upon a chair—being a respecter of persons but no respecter of property—and called for a vote of thanks to Mr. and Mrs. Steward for the most excellent Punch and Judy show they had provided, and this was given in no uncertain fashion, and before he ceased he pointed out that these two wards, in spite of the fact that they were both "taking in," had provided a concert on Monday and a party on Tuesday, no mean feat at any time, and called for another vote of thanks to the Nursing Staff, who could undertake such labours. Did the roof fall down? Not all of it.

Mary—in Lilac Time.

WAS it merely a lucky chance that the Clinical's costumes harmonised so well with the dainty lilac decorations? Anyhow, the setting for the Teatime Concert on Thursday could not possibly have been better. The Ward seemed crowded from end to end, and among a host of old friends we noticed the kindly Dr. Fawcett thoroughly enjoying himself.

The varied talent exhibited in the Concert itself exceeded all expectations. The drollery of the Clinicals and that light-hearted Gondolier Quartette took us gently from cello to Charleston and back again with the least possible æsthetic disturbance. Altogether, a well-managed and, if applause be any criterion, a most successful show.

Miss Ensor's unaccompanied string quartette opened the Concert programme. The two violins, with viola and cello, produced a remarkable volume of sound, in spite of the poor acoustics of the Ward. In the several items which they played during the course of the afternoon this little quartette appeared almost faultless in tone and technique.

We thought that Miss Healey chose just the right songs. Her quiet rendering of *Brown Bird Singing* was especially pleasant.

Personally, we could have listened to the cello playing of Mr. Wycham George for the entire afternoon, but we had to be content with Massenet's *Thais* and the somewhat intricate *Elfin Dance*. These two pieces were sufficient to reveal Mr. George as an accomplished artist, playing an instrument of unusually fine tone.

The Clinicals fought bravely against the laryngeal incompetence induced by a week's really hard work, but thoroughly lived up to their reputation. Mr. Pye-Smith betrayed a wonderful knowledge of London's streets in his cab driving episode. The duologues of Messrs. Jarman and Grasby tickled us no end. We envied these pierrots in their hoarse jolliness, and in the admirable support they had from Mr. Sale the pianist.

Miss Ruby Kelly, Nurse Mann, and Messrs. Hankey and Barber rattled off their quartette from the *Gondoliers* in the true Gilbert and Sullivan manner. We realise now how much we missed in not seeing the Musical Society's recent production.

The tinkling of cups and the handing round of cake had started before Mr. Greenway's dance band arrived. We feel sure, however, that our feet were not the only feet set going, and that our tea was not the only tea spilled in consequence. Mr. Greenway's clever combination has the slick Charleston rhythm absolutely at its finger ends. Saxophone and trumpet blared at each other, piano thumped its four in a bar, violin wailed a suspicion of a melody, but compelling banjo and throbbing insistent drum kept them so unavoidably together that we could but twist our ankles and stamp our feet in sheer admiration.

The Baby Ward.

ON Thursday, December 30th, Esmeralda and I dressed up in our best clothes and went to the Baby Ward. The reason for this was the visit of two famous gentlemen—one was Professor Bullivant and the other was Father Christmas. They arrived in order of seniority. We arrived very early and found the Ward empty, except for the floor, which was littered with children of every size and shape. It looked as if a modern Pied Piper had flown over and dropped a section of his retinue on the Baby Ward floor. "They're very careless, these Pied Piper's," I murmured to Esmeralda. She looked at me scornfully and disdained to reply. However, she is very young yet.

Soon the Ward began to fill up with the less important part of the audience—the adults. Then at a word from Sister the doors were bolted and barred and Professor Bullivant appeared—from the bathroom! He set up his "business" in front of the Christmas Tree (of which more later), and then started to keep us thoroughly amused and intrigued for a whole hour. For the first half

of his programme he conjured. And what conjuring! He broke sticks—I'm sorry, Esmeralda, I should say wands—into tiny pieces in front of our eyes and then produced them whole and undamaged from a paper bag. He borrowed a watch from the most trustful of H.P.'s, and then before the owner's horrified gaze he proceeded to bend it into impossible shapes. The Professor went on from triumph to triumph until he reached the pinnacle of his performance, when he produced a real live rabbit out of a hat. "He *must* be a *real* conjuror," Esmeralda breathed fervently in my ear. After a short pause, in which everyone talked at the top of his or her voice, the Professor went on to the second part of his performance, where he introduced us to a little boy with an Eton collar, a ruddy complexion and a most disarming manner, who, however, invariably made replies which were either rude or irrelevant to any question put to him. A most trying child! The Professor had the greatest difficulty in keeping him in order at all, particularly when the child insisted on connecting "elephants" with "Bullivants." This was a most entertaining duologue, and the Professor never once smoked a cigarette! His soft palate must be a most well-developed structure.

The next item was tea, and a magnificent tea it was. Sister and her Nursing Staff must have put in some heavy work in the preparation of that tea, and Esmeralda and I certainly did not fail to continue the good work in the consumption of it. It was some time before the Professor was served with tea, but that, I think, was because everyone thought he would prefer to conjure some out of his ubiquitous opera hat.

When the table was beginning to groan less and the children more audibly, there was a rap at the window, and in climbed Father Christmas, looking not a day older than last year. With the help of the Firm—who, I believe, kept the nicest presents for themselves—he then gave away all the good things on that overladen tree to the children, whose faces showed every phase of emotion from acute anxiety to perfect bliss. Father Christmas, having performed his duty right nobly and with the aplomb so characteristic of him, then bid every one farewell and disappeared through the window in classic style. The Baby Ward "show" has become an annual event not to be missed by any child—and it must be remembered that age does not enter at all into the definition of a child! Esmeralda and I firmly agreed that we would be there next year at all costs.

Addison.

ON Thursday, December 30th, we went to Addison to listen to the Concert so kindly provided by the Concert Artistes' Association under the leadership of Mr. Sidney Warwick, who admirably accompanied most of the items. We were overjoyed to see our old friend, Rex Harold, among the artistes and to hear his cheery greeting of "Hello, you old devil! How are you?"

Reginald Johnson started the ball rolling by taking us to the barrack square in his song *The Sergeant-Major on Parade.* His powerful voice gave us the atmosphere and, having stirred us up to a warlike frame of mind, he brought us back to earth and peace by singing *Leaning,* by Sterndale Bennett.

Miss Bertha Wilmott then sang about a gentleman whose only attribute was his skill in brewing tea, but we were given to understand that he came up to scratch in the dark. She sang as an encore a ditty advising a Mrs. Moore not to increase her family—we were expecting some original observations on contraception, but were disappointed.

Rex Harold then told us some excellent new stories and sang us two songs—an appetising one about a butcher and an ecclesiastical one about a tactful parson. We laughed till we cried, and it is rumoured that four people had to be carried out.

Cyril Shields, who has just returned from a very successful tour in South Africa, then amused and mystified us with some experiments of no ordinary merit.

Miss Malcolm sang *My World.* Her rendering of the song made her world sound even more attractive than the words portrayed.

Miss Gladys Merridew gave us a very realistic impersonation of a precocious little girl who told us sundry intimate details in the private lives of various members of her family.; her attempt to institute Community Singing did not meet with the success it deserved.

The first half of the Concert was then closed by Miss Marion Ord, who has the most delightful soprano voice, singing those two favourites *One Morning Very Early* and *I Love the Moon.*

We all then gave ourselves up to the enjoyment of the excellent tea so kindly given by Sister. Everybody did justice to it, and we would like to take this opportunity to thank Sister and the Nurses for all the trouble they took.

Graham Diprose then sang a seasonable song called the *Carol Singer.* He was followed by Charles Hayes, the strong silent man and an old college companion of Rex Harold, and once more

we were reduced to tears of laughter by his *Folk Song* and two touching love melodies, *And You* and *A Persian Passion Poem.*

Hardly had we recovered ourselves when our reserve stock of laughter was severely taxed by the acrimonious singing of Alec McGill and Gwennie Vaughan.

We were further delighted by the songs of Miss Gladys Trevor, Charles Henry, Charles Harris and the Concord Singers, who sang two part songs most admirably.

Miss Winifred Day played the accompaniments of some of the items perfectly.

Altogether, it was a most enjoyable performance, and the end came all too soon.

Eye Wards.

TUESDAY, December 28th, found Barnabas in a whirl of excitement in anticipation of the Ward Concert, and by 10 o'clock the front ward was cleared ready for the preparations to commence, and those patients who could be allowed out of bed gathered expectantly around the fire anxious to help. But very little happened. Boxing Day was still with many of us. The provisions had not arrived. The Works Department were considering the erection of a platform, and every available chair in the Hospital seemed to have been promised by someone to someone else.

At noon the provisions and the Works Department arrived, and chairs had been promised from the Kitchen and Out-Patients' Departments, and work began in earnest. Preparations were nearing completion when the audience began to arrive.

The platform, which was of unusual size, was decorated with cherry blossom, and screens draped with wall paper bearing elegant Chinese patterns in keeping with the huge Chinese lanterns which were employed as lamp shades in the Ward. The whole setting was considered to be unique for a Ward Concert.

Whilst a patient in Barnabas during the autumn 1926, the late Capt. Harry Drummond had offered to arrange the programme. This offer was gladly accepted and, although rumour ran high, it was not known with certainty what talent was to be employed to our amusement and delight until at 3 o'clock Capt. Drummond arrived and proceeded to disclose the best programme it is possible to conceive.

Well balanced with magicians, comedians, jugglers, vocalists and instrumentalists the programme included the following leading artists: The Houston Sisters, Tucker and His Violin, Mr. Tex McCloud and His Rope, and Capt. Drummond himself, who, in introducing his friends individually to his old "ward mates," as the afternoon rapidly proceeded, provided considerable entertainment and invoked an atmosphere of comfort and familiarity which made both artist and audience completely at home with each other and the spirit of Christmas.

The lengthy programme barely justified the short ten minutes allowed for tea, but it is hoped that this sufficed to permit everyone to be served with some nourishments, but when a magician produced an appetising cake from nothing and nowhere, only the plate reached the rear of the Ward for inspection—not even a currant. A better testimony to the excellence of the cooking it is impossible to imagine, but the secret was stedfastly guarded in face of insistent inquiries from the housewives in Ruth.

At the conclusion of the concert a hearty vote of thanks was passed to Capt. Drummond for his kindness and careful extensive preparations, which must have engulfed hours in correspondence and entailed no little worry. In reply, Capt. Drummond was at great pains to attempt to shift the credit from his own shoulders—the only failure in the best afternoon within living memory in the Eye Wards at Guy's.

It is with deep regret and real concern that we have to add that on New Year's Eve disaster overtook our benefactor, and that in spite of the most vigorous treatment and all the best attention he passed away on January 2nd and now lies in a churchyard at Deal, his home town. We all join in the expression of sympathy to his wife in her bereavement.

Job and Evelyn Concert.

THE Job and Evelyn Concert was held on Tuesday, December 28th, in Job Ward. Both Sisters are to be congratulated on providing an excellent tea and entertainment, which was enjoyed by patients and visitors alike, if one is to judge by the applause accorded to the various items and the rousing cheers that went up when Mr. Copley called for them at the conclusion of the Concert for the artistes and for the Sisters.

The programme was carried out by members of the Concert Artistes' Association, arranged by Mr. Sidney Warwick, and introduced through the offices of Mr. C. E. Gallagher.

The singing was excellent, the humour was of a high standard, the conjurer mystified even an amateur conjurer of some standing, and, in short, no concert could have been better.

The artistes who so generously gave their services included: Miss Jenny Bourne, soprano; Miss Mabel Wilder, mezzo-soprano; Miss Bertha Willmott, soubrette; Mr. Robert Carr, baritone (who also acted as M.C.); Mr. Frank Flavelle, tenor; Mr. Will Gardner, humorist; Mr. Charles Henry, humorist; Mr. Bret Hayden, humorist; Miss Evelyn Clifford and Mr. John Humphreys, entertainers; Miss Winnie Vaughan and Mr. Roland Merry, humorists; Mr. Cyril Shields, conjurer; Miss Winifred Day and Mr. Sidney Warwick at the piano.

The Clinical Wards Concert.

ON Tuesday, December 28th, the first Christmas Concert in the new Clinical Wards was held. It was opened at 3 p.m. by the "Clinicals," who, to celebrate the opening of the new Wards, had formed a Concert Party Troupe. The opening Chorus was received with very generous enthusiasm by those present, and especially popular was Mr. Jarman when he told the audience he had forgotten his words. This was followed by a solo number by Mr. Trick entitled *The King Who Wanted Jam for Tea.* He was obviously in favour of "early closing," for he put up the shutters on his grocer's shop in the first verse instead of the second. But everyone was in holiday mood, and so this did not matter.

A concerted number entitled *The Bolsheviks* was then given by four members of the troupe, who made a great effort to scare all the children. Mr. Grasby then sang *Linden Lea* and *The Little Irish Girl,* both of which were much appreciated by the audience, which had by this time increased greatly in size.

Mr. Theis then sang *Hi-Tiddly-Hi-Ti Island* and danced very vigorously in his native costume. In the dance and choruses he was joined by the remainder of the troupe, also dressed as Hawaian beauties. This was followed by Mr. Jarman singing *He's Not Old Enough to be Old,* which was loudly applauded, in spite of the fact that he did not forget his words. The concluding item in the first half of the programme of the troupe was *When the Red Red Robin Comes Bob Bob Bobbin' Along,* the verses of which were sung by Mr. Grasby and the choruses by all.

The audience was then entertained by Mr. Leslie, a conjurer who had come up specially from Brighton to amuse the children with his many clever tricks. When he had finished tea was served. Here Sister came into her own, and we were so well looked after that none—audience or performers—felt like doing anything but sleep. However, we were awakened from our lethargy by a jazz band, which included three Scots Guardsmen. They played a selection of the most popular modern dance numbers. Our only regret was that we could not dance, for we were almost lifted from our chairs by the music. Twice during their performance Mr. Jarman stepped into the breach to give them a rest and told us amusing stories.

The "Clinical Troupe" again took charge later, when Mr. Theis sang *Wung Bunga Boo.* This was followed by a concerted effort entitled *What Mary Had,* which was mainly topical and designed to give the audience a slight idea of life in the new Clinical Wards. The troupe showed how the Clinicals treat, or ill-treat, a patient (a Teddy Bear kindly lent by Sister Lydia), not to mention how they treat Sister and the Nurses. Mr. Pye-Smith, who in this number had excelled himself as a charming nurse, next showed how versatile he can be by relating his experiences as a driver of a "growler," pulled by his record breaking "Lightning." This was undoubtedly the finest effort in the concert, and showed his remarkable knowledge of the geography of London. It is doubtful as to who was the most amused, he or his audience, but, as all were out of control, does this matter? Meanwhile, Mr. R. E. Smith had entered the Ward dressed as a Bold Bad Chinaman. And he very kindly consented to sing *Lady, Be Good,* much to the delight of everyone present.

Mr. Grasby and Mr. Jarman then gave us songs from their repertoire and a few reminiscences. It was quite a long time before they decided to sing the same song, but eventually they sang *Choo! What a Silly Idea.* While the remaining members of the troupe prepared for the finale, Mr. Sale entertained the audience with two pianoforte solos, *Deuxieme Nocturne,* by Leybach, and a *Polonaise,* by Chopin.

The concluding item was a concerted number, *Poor Pappa,* into which two topical verses were introduced, also a set of jazz instruments. The number was concluded with a military inspection. Mr. Grasby's rebukes on his saxophone were received with great joy by all—especially the children.

At 5.50 the concert closed with *God Save the King,* followed by three cheers for Sister.

Cornelius Ward

ON Tuesday afternoon, December 28th last, the patients in Cornelius Ward and their friends were entertained at a concert arranged by that master mind of organisation, Mr. Simpson-Smith. For days before the Ward had been treated with alternating picric and flavine

dressings with such admirable effect that a well-known art celebrity was heard to exclaim on seeing it: "Wonderful, Sister. I don't know how you do it!"

Cords of fimbriated tissue of epithelial consistency, hanging in gentle festoons from light to light in the mid-line, were tastefully augmented by diagonally running restiform bodies attached above each bed, while each decussation was masked by the seasonal decorations of holly and mistletoe, here and there relieved by some exquisite flowers of sulphur, specially imported for the occasion from a warmer climate. The decorations were firmly ligatured to the neighbouring walls, and—to the glory of the Fagge(s)ites—not a surgeon's knot was to be seen.

With a precision that bespeaks much practice in the arrangement of theatre programmes, Mr. Simpson-Smith got the performers off to a good start, and at 2 p.m. found Mr. Ride broad-casting vibrations of such amplitude from his vocal chords, both true and false, we fear, that only the diplomatic intervention of the nurses saved the Turner firm plasters from being shaken to pieces. However, in time the singer settled down, and he was followed by Mr. Fennel, who, in spite of having over-taxed his voice in the Ward the previous afternoon, was persuaded to render some favourite pieces, much to the enjoyment of the audience. We were then treated to an Oriental interlude by Mr. R. E. Smith, whose excellence of make-up was only exceeded by his faultless rendering of *My Chinee Love on the Muddy Yangtse.*

Mr. Shackle was the next performer, and his piccolo solo, to the accompaniment of Mr. Waterfield on the piano, with variations and footnotes by Babinski, could not have been excelled even by the famous Argyll-Robertson pupil himself. His phrasing was excellent, his coloratura above reproach and his rhythm divine. His fingering would have made a Fagin jealous, and his stance throughout the piece betokened many a trip to Florence to study the monk at the head of the bed in Giotto's fresco, *The Death of St. Francis of Assissi.*

Scarcely had his last silvery notes ceased agitating the membrane basilares than our attention was suddenly arrested by the entry of the Yorkshire Strollers, introduced by the Corporation of Poor Puppa, and for the next half hour they proceeded to settle in public some unintelligible difference of opinion, the fight lasting the full 26 rounds. Of the six members of the troupe, besides Poor Puppa, special mention must be made of Comrade Grove, whose red moustache could not be kept from obstructing his neighbour's air-way, Comrade Housden, whose gesticulations betrayed many an hour's practice on Hyde Park soap boxes, Comrade Cann, who sang like a Baptist parson in a drought, Comrade Plowright, the power behind the scrum, and Comrade Cameron, who looked more like the morning after than the night before. Mr. Waterfield, one of the real stars, then sang a touching ballad concerning two brothers, Bahunkas and Josephus, but he was constantly interrupted by the Yorkshire Socialists, who, in the end, openly contradicted Mr. Waterfield's statement as to the post-mortem destination of Josephus.

After the stale eggs and rotten vegetables had been cleared away, one of the patients took advantage of the armistice to present a pretty lamp shade to Sister, and in excellent and perfectly worded speech, in which he bracketed her name with that of Florence Nightingale, he thanked Sister for her kindness and asked her to accept the present as a small token of their appreciation for all that she had done for them. With her accustomed grace and dignity, Sister accepted the present and fittingly asked Mr. Fagge to reply for her. Although used to performing in theatres, Mr. Fagge's style was in no way cramped by a small ward, and he eloquently supplied from his first-hand knowledge confirmation of all the previous speaker's statements. In fact, he quite spread himself, first from Sister to the rest of the Nurses in Cornelius, and then to the Nurses as a whole, until he almost persuaded us that he had forgotten that it was the Nursing Staff that was responsible for a certain "bags" episode, that it was the Nursing Staff that wrote bad and libellous poetry in the Magazine, that it was the Nursing Staff who refused to have the head lamp fittings anywhere but on the theatre wall, and last, but not least, it was the Nursing Staff who secreted round needles among his curved cutters.

After an excellent tea, Mr. Copley, in joyous mood and melodious voice, invited all and sundry to his house, which so pleased everyone that he was easily persuaded to render *Me Too* and *Billy Boy* before hurrying back to his Koran or his Harem. For the next hour the halycon calm of the Ward was somewhat disturbed by the noisy working of the ilio-tibial band, fittingly led by Mr. Leader at the piano. Despite such authorities as Cunningham, this band is best described under the following headings: Mr. Greenway, E flat alto; Mr. Epstein, violin; Mr. Banks, drums; Mr. Rodway, banjo; Mr. Emberson, trumpet. I am afraid that this is not the place to discuss the question "Is Jazz Music?"—those interested please attend Theatre on Mondays and Thursdays at 2 p.m.—but as far as jazz goes, take it from me that these are sure the boys who put the g's in ginger.

Mr. Epstein stayed a little longer to entertain us with a violin solo. Unfortunately, I did not know the piece, but I took it to be his own composition, entitled *My Three Months' Dressing in Cornelius.* In the beginning with what reverence was the work attacked, and with what care was each note prepared and sterilised before execution ! Then came the broad open tones and stately rhythm denoting self assurance and joy in the knowledge of possession of digital skill. With a swift pianissimo movement he glossed over dressings left to the Nurses, only to end with a grand rallentando, double forte, as he marched out of the Ward at the head of scores of fractures cured by his own skill.

Mr. Ettles then just dropped in as he was " Passing By " to tell us about it in song, and when Mr. Ride began to make violent love to Mr. Fennel at the piano the audience thought it high time to invoke heavenly aid on the King, thereby terminating a most successful and very enjoyable afternoon's entertainment.

Among the distinguished people present the Army was well represented by General Paralysis, V.D., who seemed to find the delectable and enticing company of Miss Bella Donna greatly to his taste, while Major Trochanter and his younger brother were seen moving in and out among the guests at tea time. That retiring, though ever important, personage Col. Ostomy, was chatting merrily with Miss Kath Eter, graceful and slim as ever. During one of the short intervals I caught sight of that much-travelled gentleman, Mr. Bill Hartzia—whom, I believe, has at last found a place of abode to his liking—exchanging reminiscences with another great tourist, Miss An Kylostoma, and that famous linguist, our old epicurean friend, Mr. Gus Tatory. Others present included Messrs. O. Mentum, J. Junum, N. D'Artery and Nobby Clarke.

Dorcas.

THE festivities here extended over a week this year, without the usual big concert, it being felt that the entertainers would be better heard and appreciated in a series of informal concerts ; and this certainly proved to be the case.

The Ward was decorated with taste and originality with bulrushes of many hues in profusion, while in many corners was seen the glint of " water," with appropriate fish and fowl—and even a Moses or two—among the blooming water lilies, all witness to the far-sighted labours of Sister and the Nurses. Father Christmas very obligingly produced a new gramophone for the Ward, which was very thoughtful of him, as the previous one had been dumb for some months, in spite of ready laryngological aid.

Perhaps the greatest day as regards musical entertainment was Tuesday, when Mr. Clay Thomas and his party very kindly visited us. The skilful bell ringing of Miss Nellie Norway, and the polished singing of Miss Norah Drake, Miss Mollie Seymour and Miss May Busby, not forgetting Mr. Thomas himself, were thoroughly enjoyed. Numerous other people sang to us—even some " Niggers " turned up in full war paint—and we had dancers and recitations besides. But space is limited ; suffice it, then, for us to express our thanks to all the artistes who so kindly spared the time to come and entertain us, and to Sister and her Nurses who worked so hard to give us, in the words of the song, a real good time.

Queen Ward Concert.

THE Concert in Queen Ward was held on Tuesday, December 28th. There was a large audience, and an excellent programme was provided for them. The concert was commenced by Mr. Greenway's Dance Orchestra, which played most of the popular dance-tunes. After the visitors had partaken of a liberal and very attractive tea, kindly provided by Sister, Mr. Norman Barber delighted the audience with three songs—*Because I Was Shy, Harlequin* and *Coaling.* A quartette, consisting of Miss Jean Mann, Miss Kelly, Mr. Chamberlain and Mr. Hankey, then gave two excerpts from *The Gondoliers—A Regular Royal Queen* and *In a Contemplative Fashion.* The rendering of these was delightful, and they were thoroughly appreciated by the audience.

Mr. W. S. Grove then sang two songs which were received with enthusiasm. Mr. Waterfield sang once again his lyric about Josephus and Behunchus. Mr. G. M. Housden then sang some *Songs of the Fair,* and the programme was concluded by Mr. R. E. Smith singing about the Red Red Robin. The topical verse caused considerable amusement.

This concert was unique, as all the artistes were " local talent," and thanks are due to them and to Sister for such an enjoyable afternoon.

Out-Patients' Dance.

THE Out-Patients' Dance was held in the Out-Patients' Hall on Monday, December 27th, and was in every way a great success. This was due chiefly to the splendid dance orchestra, which was so kindly organised and brought to such a fine state of perfection through the untiring energies of Mr. Greenway and his friends. This band had as its foundation the famous Cosmopolitan Five, the original students' dance band, and was composed almost entirely of students at this Hospital.

The dance commenced at 4 p.m., and right throughout the orchestra played—and the dancers danced—unceasingly. One dreaded to think of the feelings of the big "saxes" on being forced to play a fourth encore! But, no doubt, the interval gave some small compensation, for one noticed that after a few glasses of refreshment—perhaps it was not the lemonade we obtained!—the brass contributed the most awe-inspiring "breaks" and obligatos that have ever resounded within those walls. The hall was artistically decorated with balloons, which later on caused great amusement through the continuous efforts of some gentlemen, whose one idea seemed to be to "get at" them. However, the situation was saved by Sister Out-Patients cutting the strings which held them together. One marvelled at the almost uncanny way in which the scene had changed from that at the Landon Tea on Christmas afternoon. The dance came to an end at 8 p.m. with cheers for Sister Out-Patients and the band. To Sister Out-Patients our congratulations are due for what was a very pleasant afternoon and our thanks for the splendid way in which she and the Out-Patients' Nursing Staff looked after their guests.

Our thanks are also due to Mr. Greenway and his friends, through whom we were all able to have such a good time. The standard reached by the orchestra was very high; we never suspected we had such experts in our midst.

The "Niggers."

"IT'S half-past seven, sir." The voice of one of our three faithful servants wakened us from a peaceful slumber. Muttering our thanks for such a rude awakening, with that due calm which comes to one and all so early in the day, and having marvelled to ourselves at the regularity with which we are awakened morning after morning, and having regretted the usual regret of not getting up when called, we turned upon our restful bed and sought the "Elysian Heights" in deep repose.

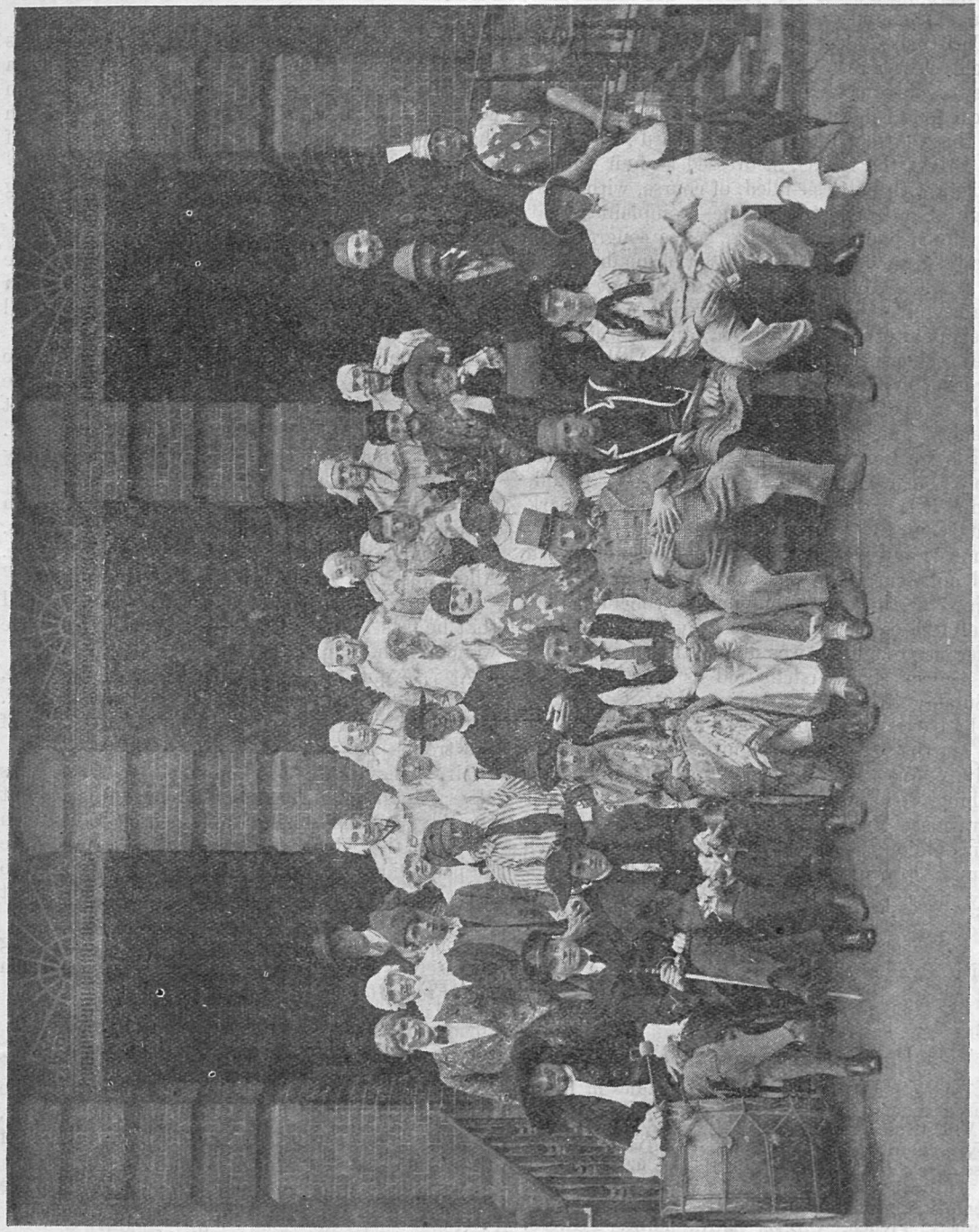
Awakening a second time we arose and made a very careful toilet; we were just putting on our immaculately creased trousers and whistling a popular air feeling that all was well when it dawned upon our somewhat unresponsive mind that a drum was tolling forth its mournful note. Amazed we listened, for why, on this beautiful morning, with the air full of the sweet scents of the fields of Kent, should a drum be tolling almost under our very roof. Looking out of our windows we beheld as strange and motley a crowd as ever we had seen: Rogues, tramps, vagabonds, a mighty gladiator, ladies in ballet dresses, of babies not a few and clergymen as well were there. Then, suddenly, we realised that this was yet another Christmas Day and these were the Niggers—and yet not one jet black. While we were taking in some of the finer points of their appearance the troupe moved off. Thoroughly intrigued, we hastily dressed and followed.

At 11.30 a.m. the President of the Residents (Mr. A. C. Copley), his natural beauty enhanced by a magnificent and most successful costume, informed a shocked Hospital in a passionate falsetto that he did not know what Mr. Halsted did in the Eye Wards. We were surprised at this confession, but were soon told that he "Looks in and looks round."

Stimulated by this repartee, Mr. Evans Jones, more becoming perhaps than usual, dressed as a Chinaman with a pigtail of extraordinary length, sang about his *Little Lacquer Lady*. We always did have our suspicions about Mr. Evans Jones!

In Queen Ward Mr. Pitt startled us with an account of his experiences as a House Officer. He must have an extensive knowledge and vast experience of the purgatives contained in the pharmacopœia! We were also told why a 10 lb. baby was like the Einstein theory. Until it was pointed out, we had not really noticed the difference, but quite agree that "both are difficult to conceive!"

Leaving Queen we went to Mary. Here we were treated to a Psalm by "Reggie" Waterfield—we must pause to congratulate him on his costume; simplicity and delicacy itself were displayed in a costume reminding us of Robin Hood; never before have we seen such a sympathetic blending of colours on the person of Mr. Waterfield. We had often wondered where Josephus went when he died, and were relieved to find that both he and Behunchus went to that "better place." Perhaps a few of the troupe did not agree with the wording of the song. Next, we were treated to a song about the moon by Mr. Shackle. We had not realised before to what great heights of sentiment he could rise. We were duly moved. Messrs. R. E. Smith and J. W. Schabort then described to us, by means of a tuneful melody, the broken slumbers of the H.P. We had always thought that the College Porters were friends of theirs.



THE "NIGGERS" 1926.

In Clinical the Clinicals first revealed to us that they were the best troupe of pseudo-optimists that have been seen for years. We must congratulate them on such a successful " run " during the Christmas Concerts. More of their doings will be told elsewhere. Massa Johnson (Mr. A. C. Copley) could not think why the patients in Clinical found it difficult to sleep. He was told that there " they found their bed'ard ! "

In Bright the O.P.O.'S, dressed as four babies, complete with bottles—filled, of course, with milk, though of rather a strange hue—complained that their Mama had gone dancing. We congratulate the lady on such an intellectual lot of quadruplets ! The R.M.O. (Mr. Gough) then sang about Sunny Havana, his efforts being vociferously applauded.

A short interval now followed, during which the babies replenished their feeding bottles, which had got rather dry owing to the activities of the rest of the troupe.

Stephen and Addison were now visited. In Addison we learned that the patients disliked intensely the morning round, consisting, as it did, of an " R.E." with a " Bodkin." This remark has its points.

Another interval and then Out-Patients. We could not hear what was sung here, but we saw the jaws of the troupe moving, so conclude that a small iota of the sound caused by seven hundred vociferous youngsters was due to the troupe itself.

In Dorcas Mr. Marshall told us how he spends his Sunday afternoons. Living in the College we had had our suspicions !

In Martha Mr. Simpson-Smith was sorry for his daddy. We also were sorry for him if he had anything of the proportions of his son. We must congratulate Mr. Simpson-Smith on his costume ; in our opinion the best if a best is possible in such an amazing medley of excellence. He was absolutely unrecognisable, a fact which speaks for itself. Massa Johnson showed his pertinacity here by a song entitled *Me Too*.

With Evelyn Ward came the spring; a Ward most artistically decorated with almond blossom. The babies, we found, were still looking for their mama, though perhaps not quite so tunefully as before. Mr. Weston described his life as a gondolier.

Mr. Hankey, dressed as a clergyman, lost his baby in Pat and Sam. We were surprised to learn that Massa Johnson did not know who Mr. Eason was and why he was so thin. Of course " 'E's in charge of the Hospital and is not fond enough of his Whitbread ! "

In Christopher Mr. Smallbone expressed a strong desire " to go to Maggie's house," while Mr. Greenwood told us about " his brown cow."

In Job Massa Johnson wanted us all " to move into his house." We were told that Massa Johnson himself was the most patient man in the Hospital " because he has got the patients of Job."

Mr. Schabort told us in Naaman that his nurse had " got long ginger hair." We notice that she has had it bobbed recently. Mr. Ettles was not sure who had stole his heart away, but Mr. L. S. Williams knew who had got his, and was simply " itching for his missus."

In Luke Mr. Northfield received many a petition that he would remove his naughty face fungus. We wonder if he will take the hint. Here Mr. Allen was very fond of a " pie with a plum in."

Mr. Birt, with true musical enthusiasm, explained that he was " the bad boy from Barcelona." We wonder if he caught a cold on the way over.

At 7.15 p.m. the troupe reached Astley-Cooper. Mr. Northfield had not taken the hint yet, and Mr. Ettles was still rather sentimental—the rest of the troupe was beyond sentimentality.

Mr. Copley finished by singing *Billy Boy*. As Massa Johnson he had worked hard throughout the day, and his indefatigable energies did much to bring the Nigger Troupe to such a fine state of perfection. We should like to congratulate too Mr. O. Ive on his untiring and excellent efforts at the piano.

Following *God Save the King*, the troupe sang themselves away to the Residents' Dinner with the *Froth Blowers' Chorus*.

Papers by Guy's Men.

T. Izod Bennett, M.D., F.R.C.P. Studies in Renal Disease : Lipoid Nephrosis, *Lancet*, 1927, i., p. 3.

J. V. C. Braithwaite, M.D., F.R.C.P. The Relation of Hyperchlorism to Mongolism : with Description of a Case, *Arch. Dis. Childhood*, 1926, i., p. 369.

R. P. Rowlands, F.R.C.S. The Waste of Life from Appendicitis, *Clin. Journ.*, 1926, lv. 613.

Herbert French, C.B.E., M.A., M.D., F.R.C.S. Rheumatoid Arthritis, *Ibid.*, 1927, lvi., p. 1.

C. S. Lane-Roberts, M.S., F.R.C.S. Pregnancy Comlicated by Ureteric Calculus *Ibid.* p. 9.

G. B. Pritchard, M.R.C.S., L.D.S. The Treatment of Pyorrhœa Alveolus, *Lancet*, 1927, i., p. 91.

Guys' Hospital Musical Society.

A GENERAL MEETING will be held in the Physiological Theatre at 9 p.m. on Tuesday, January 18th, to discuss the activities of the Society in the coming year.

All who can possibly do so are asked to be present.

New members are especially invited.

NORMAN BARBER,
LANCELOT WILLS,
Hon. Secs.

A Cruise to the Schelde in a 5-Tonner.

Modified from a Log which was awarded the "Bengorm" and "Stubbs" Challenge Cups for 1926 by the Royal Corinthian Yacht Club, who have kindly consented to the publication of this narrative.

By E. H. ROCHE.

Continued

July 21st

Looking out at 8 a.m. we found a fresh wind from S.W. and a sky heavily overcast and threatening rain. The barometer was, however, rising—29.97.

It was high water Flushing 10.30 a.m. and 11 p.m. and we estimated therefore that the tide in the Schelde would begin to ebb at 11.45 a.m., flood at 6 p.m. and ebb again at 12.15 a.m.

We decided to take the canal to Vere, enter the East Schelde and go as far up the river as we could against the ebb tide. So we got under weigh at 9.30 a.m. under 2-reefed mainsail and small jib. The bridge opened as we apporached and we passed straight through without lowering sail. The wind was almost dead astern and the double rows of trees on either side, which made the canal look very picturesque, had also the effect of making the wind uncertain in strength and direction. Gusts cam suddenly from many different quarters, and on several occasions one could not feel quite free from the risk of an accidental gybe. We reached Middleburg at 11 a.m. and bore down upon the bridge at about 6 knots. Uusally in Holland, when a boat is seen approaching, the bridge is opened irrespective of any road or foot traflc that may be waiting. But on this occasion the operator was very tardy in his movements and waited for several very old pedestrians with baskets to make their way across the canal. Then he got to work with his wheel and we watched for the opening of the bridge. It was thrilling to speculate as we approached whether the opening would be wide enough by the time we reached it. When about twenty yards from the bridge we had to admit that it was not yet sufficiently open, so we rounded up quickly and made a short tack. By the time we had reached the other side of the canal the bridge was half open so we turned again and charged through it at a good 5 knots, with a yard or two to spare on either side. In our haste we passed through on the wrong side and narrowly missed collision with a steamer. One regretted passing Middleburg with so little ceremony for, as we afterwards learned, it contains many things of great historical interest. Arriving at Vere at 12.30 p.m. we lowered sail, warped through the small lock, and tied up to the piers just beyond it to the East. There we took time to eat lunch in comfort. Vere, as we discovered last year, is a very charming place, and we felt very strongly the temptation to spend a few hours ashore. But if we were to enter the East Schelde that day it was essential to get across the banks in the Zandkreek while the tide was fairly high. So we decided to pass on without further delay. The wind was getting steadily stronger, but from our sheltered position in the canal we did not then appreciate its full strength.

We got away at 2.30 p.m. under small jib, and at the canal mouth we hoisted 2-reefed mainsail. But the wind was then very strong, and we decided to avoid the East Schelde and to follow the more sheltered waters of the Zandkreek across Beveland. So we put the helm to port at the canal mouth and headed southwards in the channel between the black and red buoys. A strong ebb tide was throwing up a steep sea and our dinghy, whose canvas cover we had neglected to put on, was shipping a good deal of water. Leaving the black buoys on the port hand we followed the channel round to the east between the Goud Plaat and Oranje Plaat. Thence forward the channel was narrow and very tortuous, the main direction being easterly. The wind was for the most part dead astern and decidedly too strong for the amount of canvas we were carrying. So we got down the mainsail and took the precaution of tying the third reef in case it should again be needed. In attempting to follow the bends of the channel the mainsail had been a source of much anxiety in the following wind, and it was a great relief to have it down. Unfortunately, our troubles were not over. In the long straight reach to the west of Geersdijk Haven we encountered some very steep sea where the full force of wind and tide were diametrically opposed to each other, and it was there that the dinghy chose to play its usual trick. First filling with water it proceeded to stand on its head, dive like

a porpoise, and generally to behave in a very unseemly manner. We had to haul her alongside, lift her bows upon the gunwale and bail her dry.

At 5 p.m. we found a snug anchorage at a sheltered bend in the creek about a mile and a half beyond Kortgene. All night we lay at anchor in calm water while the furies of the wild night howled through the rigging. A shift of wind to N.N.W. caused us to swing round as close as was comfortable to the banks on the port hand, but it did not go round any further and our rest was not disturbed.

Thursday, July 22nd

Looking out at 7 a.m. one found the morning fine and bright and the wind still strong from N.N.W. The glass had fallen to 29.4.

High water Flushing was at 11.32 a.m., so that the tide in the Schelde was due to ebb at 12.47 p.m.

Our plan was to follow the Zandkreek into the East Schelde and make for the entrance of the South Beveland Canal. So we got under weigh at 10.45 a.m., with two hours of flood tide to help us. The wind had moderated a good deal and we shook out the third reef. We entered the East Schelde at 11.30 and followed the main channel, leaving the black buoys to port. The canal entrance was almost invisible from the middle of the river, with the result that we sailed straight past without seeing it and found ourselves bearing down upon Yerseke, where there is a small tidal harbour tightly packed with fishing boats. Eventually at 2.15 we made the entrance to the canal. We noted that the tide was slack at 1.30 p.m., three-quarters of an hour after slack water at the mouth of the river, from which we were about 15 miles distant.

We very soon found to our dismay that the South Beveland Canal was a very different proposition from the one we had previously navigated. In the whole passage from Flushing to Vere we had passed only one other vessel, whereas there were in the outer harbour of Wemelding, awaiting entrance to the South Beveland Canal, enough barges, tugs and lighters to transport an Army Corps. Passing into the lock we had rather a perilous time amid the congestion of heavy traffic. In the canal we were just able to lay the course. But great care was required to adjust our speed, for there was a continuous procession of traffic, mostly under power, all the way to Hansweerd. Occasionally a bridge would close about a mile ahead and everything would come to a standstill, and we had to be very quick at getting down sail and putting out sweeps to prevent collision with the next boat ahead. Similarly, when the bridge opened and the procession started up, we had to be nippy with hoisting sail to avoid being run down by the next boat astern. Sometimes the speed would quicken, sometimes slacken, and we had to be continually hoisting or lowering the peak and adjusting sheets to keep pace with the procession. On arrival at Hansweerd we drew up just north of the lock in a sheltered corner behind some piles. We explored the town, but found nothing of special interest and turned in at 10 p.m.

Friday, July 23rd

It was a fine morning with the barometer steady at 30.05 and the wind fresh from S.W.

High water Flushing was at 12.23 p.m. The tide at the mouth of the Schelde would therefore ebb at 1.40 p.m. and the flood might be expected to begin about at 7.20. There was a long sail before us to Antwerp so we got up at 6.30 a.m. and cast off our warps at 8 o'clock. We swept into the lock where, even at that early hour, there was so much congestion of heavy barges that we were more than once in serious danger of being crushed. The wind was foul for sailing out of the lock so we accepted a tow as far as the harbour mouth. There we got under sail, but lost some time owing to the peak halyards being foul, and Tupling had to go aloft to set them free. Shaking out all our reefs we made very good way with the flood tide under us. We set course south across the river and followed the Zuider Gat round to the east, leaving the banks of Walsoorden and Valkenisse on the port hand. It being then about half tide we saved several miles by taking the Schaar van de Noord across the van Saaftinge Bank. From there onwards the main course of the river was south-easterly, which was comfortable sailing with sheets slightly free, but in two reaches it bore round to S.W. and forced us to beat. With a strong tide under us, however, these reaches were soon traversed and not many tacks were needed. Interest was added to the passage by a friendly race with two large British ketches which left Hansweerd just ahead of us. After 25 miles of hard sailing we finished level. At 12.30 we arrived at Antwerp and anchored in 3 fathoms on the south bank just below the bend of the river, N.W. of the red light buoy. There is very good anchorage on that side of the river for a considerable distance above and below the bend, but care must be taken to avoid the spit that runs out from the point to within a few yards of the red light buoy. Probably the best anchorage is opposite the Yacht Club, about half a mile above the bend. None of our sailing handbooks contained any information about Antwerp, and we

therefore made careful notes of various matters of interest to yachtsmen. We recorded, for example, the maximum range of the tide and observed that the turn of tide at Antwerp was three hours later than Flushing and we constructed a simple formula for estimating approximately the time at which the tide would turn in the River at any given distance from the sea. This was accurate to the nearest 10 or 15 minutes and subsequently proved of great value to us.

Going ashore in the afternoon we spent some very pleasant hours exploring that ancient and interesting town. Like most towns of that size in Belgium its two finest and most striking works of art are the Cathedral and the Civic Hall. But things that have stood for centuries do not hasten to entrust their secrets to the passing traveller, and it is possible that though we looked long and earnestly at those fine old buildings we appreciated but little of their meaning. Returning to the water front some four or five hours later we became painfully aware of the extent of the rise and fall of the tide at Antwerp. For the dinghy which we had left floating in deep water was perched high and dry on the top of a causeway of enormous and jagged boulders, and the task of getting her down to the water was by no means an easy one. I have often thought that if our dinghy could speak it would have some very strange and remarkable stories to tell. For, apart from the ordinary little pranks that are common to all dinghys, ours has the distinction of diving like a porpoise when it swamps, and can boast of having broken adrift many times, and swamped very many times in the most awkward places, of having been driven ashore in storms at Mevagissy and Nieuport, and of having been incarcerated and submerged for 9 hours under the old wooden steps of Dover Pier.

(To be Continued.)

Some Dental Cases.

By R. CUTLER, L.D.S.

IN spite of the increasing relationship between the dental and medical professions, some few of the latter still seem to regard the dental surgeon as one whose horizon is limited by the extraction of the teeth from the jaws; be this as it may, a description of a few dental cases, considered from a point of view of treatment, may not be uninteresting to both alike.

(1) W. F., æt. 60, presented himself at Dental O.P. with a considerable swelling at the angle of mandible on the left side; he was obviously rather ill, and complained of inability to eat or sleep. Clinical examination showed the left lower third molar—a badly broken down tooth—to be responsible, and it was decided to treat the case the same afternoon.

Nitrous oxide having been induced in the ordinary manner—*i.e.*, facepiece induction—an attempt was made to remove the tooth with forceps, but the crown collapsed immediately under pressure; moreover, the use of elevators also proved unavailing, although the laceration of tissue produced by them caused the copious evacuation of much evil-smelling pus. Nothing further could be attempted, and both on that and the following day the patient was syringed with the atomiser and ordered the constant use of a hot eusol .275 per cent. mouth wash.

The day after, the patient was considerably worse, and a very considerable swelling had developed in the soft palate and posterior pharyngeal wall. A sufficiently serious view of the condition was taken as to consider the advisability of "taking in," but after considerable discussion this was relegated till the following day.

Constant irrigation was continued, and the next day the patient, although somewhat toxic, seemed much better, the swelling having abated to a marked extent. An X-Ray photograph—large film—was taken, and the same afternoon gas anæsthesia was induced by the continuous nasal method. With considerable difficulty the anterior root was removed with elevators, but before anything more could be done the patient became cyanotic and ceased to breathe. He was at once placed on the floor and the tongue having been pulled to one side to clear the air way, respiration recommenced some forty-five seconds after the application of artificial respiration. He recovered completely, and during the following week the socket was continually irrigated with antiseptic. He improved in health, although complaining of considerable pain, and another X-Ray plate showed a large patch of necrosis at the apex of the posterior root, which remained. Gas anæsthesia was then again induced in the ordinary way, and

the remaining root was removed by Mr. Pritchard with an elevator. The patient took the anæsthetic well, and made a quick and complete recovery, although experiencing some difficulty in opening the mouth widely for some considerable time.

Such a case tends to show the doubtful wisdom of attempting difficult—or even potentially difficult—operations under gas anæsthesia even when induced nasally; it also shows that with very toxic patients this latter method is not unattended by slight risk.

(2) J. H., æt. 40, was referred to us by Surgical Out-Patients. He had a fracture of the right mandible at the angle and gave a history of a blow some days previously. The mouth was very septic, and there was considerable swelling of the right side of the face, spreading down into the neck; he had a temperature of 100°, and obviously was rather ill. The case was almost severe enough to warrant "taking in," but, after discussion, it was decided to carry on with the case independently.

The same day several of the worse teeth were extracted under gas anæsthesia. In removing the upper third molar on the right side, a very large portion of the tuberosity came away, fortunately without opening the antrum. (It subsequently transpired from the evidence of the X-Ray plate that the tuberosity had been fractured by the force of the blow transmitted through opposing teeth).

The next day the patient was much better, and the remaining teeth, with the exception of the upper canines and lower incisors, were removed; the mouth was regularly irrigated with the atomiser, and in one week's time the swelling had entirely subsided. The policy of leaving the upper canines was ultimately justified, as although they interfered gravely with the taking of an accurate impression of the lower jaw, yet by their articulation with the lower teeth they served to show when reduction was complete. This was accomplished by a metal "chin boot," fitted with triple straps and used in conjunction with a "gunning" splint.

In cases such as these it is usually found that the severity of swellings associated with fractures varies directly as the relative cleanliness of the mouth.

(3) J. L., æt. 22, had been "warded," and was referred to us for treatment of fractured mandible. This was on the right side, in front of the last molar tooth. The displacement was typical, the bite of the greater fragment being gagged open to the extent of a quarter of an inch. The mouth was very clean and swelling slight, but there was considerable pain as the mandibular nerve was involved, this being indicated by anæsthesia of the mental cutaneous area on that side. X-Ray plates were taken—antero-posterior and oblique large films—models prepared from impressions and the molar tooth in line of fracture removed. Until such time as the splints were ready the patient's jaw was strapped up with a four-tail bandage.

During this period, although the lad felt fit in himself, he stated he was quite unable to swallow, and in actual evidence of this saliva dribbled continually from his mouth.

As soon as the lower splint—which bore a long metal and gutta-percha extension on the affected side—was fitted, however, he stated he could swallow perfectly. This is rather interesting, in so far as the superior constrictor of the pharynx is attached to the alveolar process of the mandible above the posterior end of the mylohyoid line, showing how perfectly the splint extension antagonised the pull of this muscle.

Recovery has been uneventful, sensation in the cutaneous area having reappeared within a month of the accident.

(4) E. Q., æt. about 25, had been in Martha Ward for some period suffering from an osteomyelitis of long duration, with continued pyrexia. Clinical examination of the mouth showed the presence of many loose teeth and septic roots.

Extraction of two isolated teeth being unattended by any reaction, three days after all the remaining teeth were removed under a general anæsthetic—ether with nasal continuation. There was no reaction; the next day the patient was apyrexial, and remained so until the time of discharge.

In such cases, where an "open infection" is present—*i.e.*, many loose teeth—copious exudation of pus from gingival margin—multiple extraction is unattended by any material reaction.

Although it must be admitted that such cases as have been rather briefly described do not confront the dental surgeon every day, yet they do occur with surprising regularity, and can only serve to illustrate the need for sincere co-operation between the dental and general surgeon, and also for the exercise of some skill and discretion on the part of the dental surgeon himself.

Correspondence.

Guide to Library Facilities and Printed Sources of Bibliographical Information.

SIR,—With the generous help of the Carnegie United Kingdom Trust the National Union of Students has published a *Guide to Library Facilities and Printed Sources of Bibliographical Information.* Excellent facilities of both kinds exist, which are not used by many students because, never having considered what *sorts* of bodies and publications contain the bibliographies of their subjects, they do not know how to familiarise themselves with them. To put this potential demand in touch with the existing supply is a very important need, and an indisputable prevention of waste.

Young organisations like the County Libraries and the Central Libraries for Students with their Outlier Libraries are striving to *create* and satisfy an intelligent demand for books from those who, by their own resources, could obtain but tardy and inadequate access to the better equipped libraries. Yet invaluable labour-saving instruments like the *Subject Index to Periodicals* and the *International Catalogue of Scientific Literature* are languishing for want of support. If a student never learns to discover his bibliographical guides for himself he becomes an incubus on the librarian, and is contributing to the waste of the enormous mass of printed knowledge already in existence.

The guide referred to aims at helping to abolish this unsatisfactory, not to say paradoxical, state of affairs.

Yours very truly,
R. NUNN MAY, N.U.M., *Secretary.*

3, Endsleigh Street,
London, W.C.1.
January 7th, 1927.

A Country Practice.

SIR,—Having recently been staying with a relative who is practising in a country village, I thought a day's doings might be of interest, as the country is considered by so many to be dull.

(1) Called to a woman who had been burnt to death owing to the explosion of an oil stove.

(2) Her husband was very severely burnt in endeavouring to save his wife's life.

(3) Urgent call to a large country house—a baby, 2 months old, had been placed in a perambulator and put out in the grounds, as usual, for fresh air and sunshine. An hour afterwards the nurse, on going out, found the child dead and blood had been coming from the mouth. No evidence of violence.

(4) Having arrived back to his doorstep was summoned at once to an accident a little way down the road. Motor bicycle smash; man on the ground with a fractured base and broken collar bone. Lifted him into his—the doctor's—car and drove him to the cottage hospital, which they are thinking of enlarging to the size of Guy's!

(5) Two confinements, one of them twins.

(6) Usual items of a general practice.

(7) After dinner I motored with him in his runabout as he had to visit a patient a short distance out of the village. We were proceeding up a very narrow lane—only just room for the car—noticed a horse on the hedge in front of us; as we passed the animal was so scared that he took a flying leap over our heads and landed on the hedge opposite. The view of a horse's abdomen from below was somewhat an unusual angle for the view in question.

(8) Having returned home we switched on a pipe, a whiskey and soda, and also London, Manchester, Edinburgh, Glasgow, Paris, Berlin, and finished with New York, retiring to rest at 2 a.m. after a quiet day.

There are people who say the country is dull!

Yours faithfully,
A LONDONER.

August 22nd, 1926.

Rugby Football.

DEAR SIR,—We are now through with the first half of the Rugby programme, and it is interesting to view our 1st XV results with that of the corresponding time last season. The figures given below are not exhilarating, but improvement has taken place in the latter matches, and we have also been unfortunate, losing good men with injuries. A noteworthy feature of some of the early games was the close scoring, on three occasions, Guy's winning by 1 point, viz.: United Services, Aldershot Services and Bristol. It was a pity that Blackheath arranged a fixture with the Maoris on the same date as they were down to play us at Honor Oak Park. The team they sent over was therefore not a strong one, and what is looked to as *the* club match of the year was thus spoiled; as it happened, however, the weather on this day was atrocious, only twenty minutes were played each way, Guy's winning by 3 tries to 0.

Let us hope improved form will be shown during the New Year, because we want that "Cup" back again at Guy's. The following figures show details up to December 31st, 1926, and the figures for the corresponding time last season:

1926—Played 17, Won 7, Drew 1, Lost 9; Points for 164, Against 212; per cent. 44.1.

1925—Played 13, Won 5, Drew 2, Lost 6; Points for 85, Against 109; per cent. 46.15.

I am,
Yours truly,
ROY C. HOLLOWAY.

"Thyrlstane,"
The Highway,
Peacehaven, Sussex.
December 29th, 1926.

Publications Received.

The British Medical Journal, The Lancet, The Birmingham Medical Review, The Chemical Age, King's College Review, St. Mary's Hospital Gazette, The Hospital Gazette, The Umpa, The Medical Review, Car and Golf, The Pharmaceutical Journal, Long Island Medical Journal, The Burma Medical Times, University College Hospital Magazine, Nursing Mirror, Middlesex Hospital Journal, The Architectural Association Journal, Nursing Times, Oral Health, Antiseptic, Medical Journal of South Africa, St. Bartholomew's Hospital Journal, The Navy, Journal of Massage and Medical Gymnastics, The Dental Record, Golf Illustrated.

Reviews.

The Elements of Medical Treatment. By ROBERT HUTCHISON, M.D. Published by John Wright & Sons, Ltd., Bristol. *Price 7s. 6d. net.*

THIS admirable little book is in no sense a treatise on medical treatment. It is, as the author says in his preface, some notes, originally delivered in lecture form, on the elements of general medical treatment, particular stress being laid on the prescribing of drugs, a side of treatment almost entirely absent from the students' teaching in a general hospital. It will particularly appeal to the man doing his second three months in the medical wards, who is becoming panic stricken at the thought of being cast into general practice or an "H.P.-ship" without being able to prescribe drugs or other necessary "placebo's" for a disease, the main characteristics and treatment of which he may have at his finger tips. Also many points of diet and attention to the patient's general comfort, which in hospital are left to the nursing staff, are here discussed at some length and should prove invaluable to the budding G.P.

After a chapter on the general treatment of the sick person, the author goes on to more detail in chapters on such things as fever, constipation, diarrhœa, insomnia, dyspepsia and bronchitis, all likely complications of the change from normal in a patient's life necessitated by disease. There are also valuable tips on diet and the use of insulin in diabetes, the use and abuse of "tonics," and some sound commonsense principles of psychotherapy.

The whole is delightfully—even in parts racily—written, although it is necessarily a little thin in places. All through the book the author emphasises the necessity for studying each patient individually and the "individualising of treatment," a point apt to be overlooked in hospital practice. As he says, in his introductory chapter, "one must cut one's therapeutic coat according to one's cloth."

Sport.

Rugby.

Guy's v. Coventry.

IT was a great victory the Hospital gained at Honor Oak Park on Boxing Day, December 27th, over a team so habitually successful as Coventry. Both XV's laid equal claim to absentees, and there was therefore nothing in that. How many I cannot exactly say, but doubtless a good proportion of the Hospital XV had been very busy both professionally and in assisting in the various ward entertainments all through Christmas. Even so, they maintained both pace and stamina, and as the end approached, if the attack had lost some sting the defence was very staunch, a wonderful tribute to the fitness of the players. A good crowd turned up to witness a well-played game. It was a happy thought of Mr. Parker-Tupling's, last year's Hon. Secretary, to arrange a Boxing Day fixture. On the grand stand it was good to see Dr. Fawcett; other members of the Staff present were: The Superintendent, Mr. Fagge, Mr. Philip Turner, Mr. Ogilvie, etc.

A very interesting opening was a dash by Guy's down the right; for a moment it looked like a sensational commencement. No try resulted, but Coventry were relieved when Lole punted for touch, from where F. Ford headed a rush to safety. A strong dribble, with Simpson-Smith prominent and Jones in support, found Pemberton beaten,

Harley, the Coventry right wing, running back and kicking beyond touch-in-goal. Again, Coventry relieved, and this time P. D. B. Spence, whom all were glad to see on the field again, stopped the effort with a clever left foot kick to touch. Directly after, play swung back to Coventry's 25. After good work by F. H. B. Spence, J. G. Van Schalkwijk gained a clever try and J. C. T. Tregarthen goaled.

Now Coventry put on steam, handling very neatly, but our marking was very effective. T. Mayo put in a cross kick which bounced straight into the hands of H. Lee, who planted the ball behind the posts. H. Lole missed the conversion. Before half time T. O. Garland gained a try, by doing the unexpected—going on instead of passing. His try J. C. T. Tregarthen converted with a long-range kick.

Both packs played extremely well all through a very hard second half, and it would be a brave man who would say which pack was the better. Certainly, our own men did valiantly, and both halves as well. J. G. Van Schalkwijk deserves our thanks for coming to our assistance so splendidly. His display makes us all the more regretful that he is not available for the Cup Ties. W. D. G. Jones and O. Ive were the best of the three-quarters, but in defence all were solid. P. D. B. Spence at full back was as skilful and safe as ever. Two-thirds of the second half had elapsed before Coventry gained their next points in the shape of a goal dropped by O. Hicks. Coventry had often been well placed, but the finish was not forthcoming. Guy's rallied again, and the final spurt almost brought us further success.

Result—Guys, 2 goals (10 points); Coventry, 1 dropped goal, 1 try (7 points).

Guy's Team—P. D. B. Spence; O. Ive, W. D. G. Jones, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, J. G. Van Schalkwijk; G. G. Cameron, W. H. Myburgh, J. W. Schabort, L. Brown, J. H. Richmond, J. C. T. Tregarthen, A. Simpson-Smith, J. Van Nickerk.

Guy's v. Cardiff.

ON Saturday, December 18th, the Hospital XV made the long journey to Cardiff. Clarke, unfortunately, missed the train by which the others travelled and arrived on the field after Dr. T. Wallace, the old Irish International, had kindly consented to play and some minutes after the game had commenced.

T. O. Garland was again in very fine form for the Hospital, and he it was who scored our first try. The forwards were splendid, but our backs, Garland excepted, did not quite come up to standard. After Garland's success, Cardiff were then awarded a penalty kick, and B. O. Male successfully goaled, to be followed a little later by a goal kicked by the same player from a try gained by W. J. Ould. But Durr had converted not only Garland's, but also another try which Lewis had obtained after some really clever work by forwards and backs, the passing being swift and accurate. At half time we led by 10 points to 8.

Cardiff regained the lead soon after resuming, the Welsh three-quarter, R. A. Cornish, gaining an unconverted try. We were now 10 to Cardiff's 11. Play became very keen, it being a really fine game, both sides going all out. Twice again were we penalised; on both occasions Male kicked a goal. Besides these scores, Turnbull had gained a very good try after a clever run, which fully merited three points. These penalties were rather heart-breaking. Each time a Guy's man was tackled and literally smothered by other players, he found on getting to his feet that he was penalised for not playing the ball or not at once removing himself from the ball. The final score was: Cardiff, 2 converted goals 3 penalty goals and 1 try to 2 converted goals (22 points to 10 points). With ordinary luck this margin would have been much less, and the Hospital put up a very fine game against one of the most powerful Welsh sides playing to-day. It should be added that the game was a thoroughly enjoyable one and very keenly fought out.

Guy's Team—V. G. Boyle; Dr. T. Wallace, W. D. G. Jones, F. H. B. Spence, A. D. J. Lewis; T. O. Garland, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. Durr, J. W. Schabort, A. Simpson-Smith, C. D. Malone, J. H. Richmond, L. Brown.

Guy's v. United Services.

THIS half of our programme is ending with crowded days. Last Saturday Aberavon, the following Wednesday, December 15th, the above match, and next Saturday Cardiff completes a strenuous and lengthy first portion of our fixture list. It was impossible to take down to Portsmouth a full side, and the Services also could not put their proper strength out.

At the interval the scores were level with 3 points each, but the Services lost Lieut. Mackenzie Watson, who had damaged an ankle. Almost as soon as the game was resumed, we succeeded in gaining another unconverted try, and there, so far as Guy's are concerned, the story ends, for the home side went ahead, adding 2 goals and another try, the Services thus winning by 2 goals and 3 tries to 2 tries (19 points to 6).

Guy's Team—V. G. Boyle; A. J. D. Lewis, F. H. B. Spence, W. D. G. Jones, F. T. Wilkinson; V. R. Preen, T. O. Garland; W. H. Myburgh, J.

Durr, A. Simpson-Smith, A. B. Clarke, J. H. Richmond, L. Brown, C. D. Malone, J. C. T. Tregarthen.

"A" XV v. O.M.T. "A."

ON Saturday, January 1st, the XV played the Old Merchant Taylor's "A" at Honor Oak Park, and beat them by 18 points to 3 points. The game was rendered all the more interesting because each team had only been beaten twice before this season, and that one of these defeats had been, in each case, at the hand of the Old Blues. Although neither team was at full strength, it can safely be said that the Hospital was more unfortunate in this respect, but as subsequent events showed, sufficiently strong to leave no doubt about their superiority. Again, there was a general air of listlessness apparent in everybody before the game, but once started the game assumed a robustness which caused one very much to wonder whether dissipation and festivity are passing out of fashion on New Years' Eve or whether mankind, and in particular Hospital mankind, are becoming more immune to the after effects. The game rapidly developed into a tussle between the respective packs, as neither set of three-quarters appeared to be able to hold their passes, and after a more or less even start, the Hospital gradually established a superiority which they never relinquished. The first score came when Jones punted up the middle of the field and, following up rapidly, he beat the opposing full back for possession and scored under the posts. Tregarthen added the necessary points, and it might save time to state now that he converted the two other tries that were subsequently scored. He has a way when converting, which the 1st XV found very useful on Boxing Day. The second try came from Barnes. One might almost call it a combined effort, as he was gently shepherded over the line by Ettles, who seemed rather keen on scoring the try there and then. However, Barnes was not to be flurried, and spurred on, no doubt, by the frenzied excitement of the mere handful of spectators, he leisurely proceeded to a more central position. Not long after this the O.M.T.'s scored their only try from a forward rush. It would have given us more pleasure if this try had been scored by a certain raucous, hot and dishevelled individual in the opposing pack. He had a vaguely familiar face, and he certainly did enough shouting.

The only additional score came early in the second half, when Jones cut through in really classical style to score under the posts. However, just before the end Barnes and Ettles performed their little parlour trick again, but the referee was obviously getting tired of dual efforts and disallowed the try.

The pack played a really rousing game. Jones was very conspicuous and his intentions with the ball were always of the best, even if at times they were slightly myopic, while Eckhoff, who was making a welcome return, was very useful in the line-out.

The outsides were bad, and the fault lay chiefly with the stand-off half, who was very good and very bad in turns, but chiefly the latter. His inability to pass was one of the chief causes of the trouble. Wilkinson had not many chances, while Smith showed that he was a much improved player and would have been very dangerous if he had had more of the ball. Wells on the other wing was practically neglected by his "inside" Hutchinson, who seemed to spend most of the afternoon chasing himself round in small circles.

Guy's Team—T. B. Pitts; W. H. Smith, F. T. Wilkinson, J. C. Hutchinson, W. C. Wells; W. D. G. Jones, T. J. Barnes; J. C. T. Tregarthen (capt.), J. H. Cullman, C. E. W. Kurtz, T. M. Calhaem, N. L. Eckhoff, D. C. M. Ettles, A. H. Russell, J. W. H. Jones.

Rugby Fixtures.

Date	*Opponents*	*Ground*
Jan. 15	Birkenhead Park	Birkenhead Park
Jan. 19	Royal Naval College	Honor Oak Park
Jan. 22	Gloucester	Honor Oak Park
Jan. 29	Old Alleynians	Dulwich
Feb. 5	Bedford	Honor Oak Park
Feb. 9	Cambridge University	Honor Oak Park

Pass List.

University of Durham.

M.B., B.S.

December 1926.

S. Canofsky.

Society of Apothecaries of London.

December 1926.

Forensic Medicine :

L. W. Rose.

Midwifery :

T. C. Lansdale.

University of Cambridge.

Third Examination for Medical and Surgical Degrees.

PART I.

Surgery Midwifery and Gynæcology :

A. T. Curnow.

SECOND EXAMINATION—PART II

Human Anatomy and Physiology :

I. B. Morris.

EDS. { P.F.S.C. G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *January 29th, 1927.* *Number 1005*

PASSIM

MR. H. G. WELLS in a recent article attacked vigorously the conception that the nature of man is fundamentally unalterable, and expanding a thesis enunciated by Professor Wood Jones in his book, *Arboreal Man*, states that man owes his pre-eminence to the very fact that his mind is capable of rapid changes in adjustment to new conditions. To the shibboleth of fundamental unalterability, Mr. Wells attributes the clogging type of conservatism, and in his article suggests an ability of human nature to alter extensively in the period of a few generations.

Mr. Wells is a reformer and, as such, must state his case forcibly and arrestingly, and not in the manner of a scientist. It seems to us that the truth, as is usual when there are conflicting views, lies somewhere in the mid-way. It would seem, therefore, that the strands of the fabric of human character are unchangeable, and the only variations are in the weaving. Sir Arthur Keith asserts that the qualities for academical success are identical with those of a good housewife and that the aborigine of Northern Australia had long anticipated, in his method of tapping and listening to hollow trees when hunting the opossum, the principles of percussion and auscultation. Here are different fabrics woven of similar materials.

In two volumes of essays the late Dr. McLaurin has unravelled with great skill the fibres which go to form the characters of several historical figures, and much of the Essays' interest lies in the comparison of present day tendencies with similar ones directed to different ends by the influences of other ages. Looking through old numbers of the GAZETTE one is struck by much that is not very different from to-day—and by a great deal that is. The first GAZETTES were, naturally, much more intimate than now—for example, the complete devotion of " Passim " to a flow of sympathy for those men up for the " Final Colleges." Quite frequently the GAZETTE columns were used for personal abuse, following, as a rule, some professional argument. (As were, we believe, the columns of more prominent medical contemporaries.)

In an early number we read that it was the badge of a Senior Dresser to carry displayed in his breast pocket his armamentarium of catheters; and it is interesting that at the time of the initiation of the GAZETTE the roystering medical student of earlier times had fallen into disfavour. This is brought out by the following poetical effort in the first volume:

" The medical student of long ago,
Who spoke of all study as decidedly slow,
Who'd a taste for tobacco—a relish for beer—
Who never quite knew when he'd had *quantum suff.*
Who dressed in a manner decidedly queer
With buttons like cheese plates on pea jacket rough.
(This picture, if I remember it well,
Albertus Smith *scripsit*, Johannus Leech *del.*),
Who swore like a fish-fag—and fought like a —bah!
Nous avons changé, as you know, *tout cela.*
And even if when it was drawn this was true,
It isn't so now in eighteen seventy-two."

The first GAZETTES were published with the object of bringing into contact with one another people in different departments of the Hospital. The field is wider to-day, for we have, in addition, to bring into contact people of different generations in the "greater Guy's," as far flung as the Empire. We should therefore like to express how much we appreciate items of news concerning Guy's men. Reminiscences from men of earlier generations are particularly acceptable. It is, for instance, a matter for much rejoicing to hear of a prominent medical man in his younger days climbing to the top of the chimney tower of Hunt's House to crown it with ridicule.

ON the 6th of next month the new catering arrangements come into force in the College. The success of this venture depends absolutely upon the support which it receives from students at the Hospital, for whose benefit entirely it is run. We therefore do exhort everyone to do his bit towards establishing the scheme on a secure footing. There will, no doubt, be at first difficulties and inequalities, but it is only by supporting the Company through the maiden voyage that ultimate success can be achieved, of which end there is every prospect of fulfilment if one and all enter into the spirit of the scheme.

We should like to express to the Aerated Bread Company, and particularly to the staff in the College, our gratitude for their many past courtesies during their long period of catering.

WE have been asked by the Secretary of the Sailing Club to bring to notice the excellent facilities for sailing that will be available next summer.

Owing to Dr. French, there will be a dinghy for Guy's men every week-end at Fambridge, where good and cheap accommodation can be obtained.

The Secretary (Mr. G. Nesbitt Wood) would like it emphasised that *no* previous knowledge of sailing is necessary, and requests that anyone wishing to hear further details will leave a note in the front lodge arranging a meeting with him in the reading room of the College.

Men in their pre-clinical years are specially invited to take advantage of this sport, which is a well proven antidote to the stuffiness of the Borough atmosphere in summer.

THE Residents' Play, *The House Surgeon's Dilemma*, will be produced in the Physiological Theatre on the evenings of February 8th, 9th, 10th and 11th. It is very advisable to book seats early, and tickets may be obtained from Messrs. Ettles and Simpson-Smith. Those who are unable to obtain seats will be admitted to the Dress Rehearsal on February 7th. Although the utmost secrecy is observed in the rehearsals of the Residents' plays—and anything in the nature of "copy" strictly censored—we can predict that this year's play will be more than usually scintillating.

WE have been asked to remind Guy's men that there is kept by the Appointments Committee in the Medical School Office, a Register of Guy's medical and dental men desiring appointments, and that this Committee will be pleased to recommend and help at all times men seeking "locums," assistantships or partnerships or hospital appointments.

Applications for enlistment on the Register should be made to the Dean of the Medical School.

AS a small reminder of the regard which her many friends among Dressers, Out-Patient Officers and Housemen had for her, Miss Dorothy Griffith was presented with a silver and tortoiseshell brush and comb set at an informal farewell gathering on January 21st.

WE have been asked to remind unqualified men at the Hospital that the *Guy's Hospital Reports for* 1927 may be had at the specially reduced rate of £1 1*s*. for the volume. These reports, which are unique, record the most recent advances at the Hospital, and make useful additions to any reference library. Subscriptions should be paid to the Wills Librarian, who has also a few sets of past years which can be obtained at a reduced rate by subscribers to the current volume.

THE following appointments have been made :

House Physicians—

To Dr. French, Mr. J. A. Jackson.
Dr. Poulton, Mr. P. F. S. Court.

House Surgeons—

To Mr. Fagge, Mr. W. S. Grove.
Mr. Turner, Mr. E. H. Roche.

Out-Patient Officers—

Messrs. L. R. B. Birt, R. C. Brock, G. T. Hankey, L. S. Williams.

Assistant House-Surgeons—

To Mr. Hughes, Mr. F. J. T. Sale.
Mr. Davies-Colley, Mr. S. R. Trick.
Mr. Bromley, Mr. E. J. Pye-Smith.
Mr. Slesinger, Mr. E. D. Y. Grasby.
Mr. Ogilvie, Mr. R. Jarman.

Ophthalmic House Surgeon—
Mr. H. W. Applin.
Ear, Nose and Throat House Surgeon—
Mr. S. E. Theis.
Genito Urinary House Surgeon—
Mr. J. G. Weston.

SISTER OUT-PATIENTS has asked that her best thanks be expressed for the magnificent response to the appeal for the Ronald Landon Tea Fund.

WE draw the attention of our readers to the article on a proposed Bridge competition elsewhere in this number and look forward to an inundation of difficult hands.

ON another page will be found the arrangements made by the Guy's Hospital Rifle Association to shoot at the Cripplegate Institute Range during the winter season.

Catering for the Student's Club.

AFTER dinner on the night of Saturday, February 5th, the Aerated Bread Company hand over the catering arrangements in the College to the newly-formed Guy's Hospital College Catering Company.

In a community of the size of ours, it is clearly possible for us to run our own catering, and to utilise the profits partly to give better value than can be obtained outside, and partly to support such of our own institutions as may need help, the Clubs' Union. These are the aims of the newly former Catering Company.

It has been a perpetual source of discontent that, under the old régime, students' complaints were either unheard or unheeded. The new company will have three students on the Board of Directors, and an easy means is thus afforded to ensure that all reasonable complaints reach the ears of the authorities concerned. Suggestions for improvement will always be welcomed, for the only desire of the directors of the new company is to provide good food and good service at reasonable prices.

In view of the fact that the new company represents an endeavour on the part of Guy's men to run the catering for the benefit of Guy's, the movement deserves the whole-hearted support of all Guy's men. The accommodation of the dining room should be taxed to its uttermost daily.

There will be no necessity for students to go outside for their meals—a varied "a la carte" lunch and dinner will be available every day at reasonable prices—in addition, there will be a special "table d'hote" lunch (two courses) available for 1*s.* 4*d.* For those who wish to pay in advance there will be books of checks of the value of 10*s.*, for which they can obtain goods of equal value. Residents will have the option of having meals (excluding tea) for a 5-day week at 25*s.* per week, and those who wish to have their meals for the 7-day week will be charged 33*s.* per week (excluding tea).

Draughts, Chess and Dominoes will be provided in the smoking room, and if there is sufficient demand this room will be opened for the serving of tea.

Everybody is assured that the authorities will aim at doing their utmost in the interests of both residents and students. Their idea is to give complete satisfaction, both as regards prices and quality. Of course, it is early to say what profits (if any) are likely to be made, but everybody is assured that immediately the profits have been ascertained, the prices will be regulated.

There will be plenty of room, as extra accommodation and service is being provided.

The names of the directors and officials of the company are as follows:

Directors:
Professor T. B. Johnston (*Chairman*).
W. M. Mollison, M.Ch.
R. Davies-Colley, C.M.G., M.Ch.
E. C. Hughes, M.Ch., M.D.
W. D. Doherty, M.Ch.

Student Directors:
R. Jarman.
E. J. Pye-Smith.
O. Plowright.

Secretary:
J. H. E. Winston.

Manager:
B. Francis.

A Discussion of the Clean Milk Problem.

A Paper read before Guy's Hospital Physiological Society by Mr. T. W. E. Pugh.

MR. CHAIRMAN AND GENTLEMEN,—This paper is presented to-night at the invitation of Professor Pembrey, as the result of some views expressed during the discussion on Mr. Kenshole's able paper on "Immunity" during last session.

One ventured, on that occasion, to give a few reasons why "a clean milk supply" seemed not only desirable, but absolutely essential. To-night the opportunity has been given to bring a paper before you which is chiefly devoted to a further statement of some of the facts in the hope that after a thorough exchange of ideas it will be possible to obtain a unanimous decision among the members of this Society on a problem that will confront you almost every day of your professional career.

To illustrate what is meant by "Dirty Milk," it will be interesting to touch briefly on how milk is normally produced for commercial purposes in this country:

(i) The cows are generally housed in low, badly-ventilated and ill-lighted sheds.

(ii) The floors are frequently made of cobble stones, bricks or even mud, in which the urine tends to collect and stagnate.

(iii) The cows' hindquarters and tail are always plastered with dung.

(iv) No means are provided for the men coming in from the fields to obtain a good wash before milking, let alone any opportunity for cleansing the cows.

Thus, it will be seen how easily the milk becomes contaminated with:

(*a*) Dirt off the milker's hands.

(*b*) Fæces and bedding from the tail, flanks and dder.

(*c*) Even vaginal and uterine discharged.

Added to this such factors as (i) Expectoration put on the hands, to facilitate the act of milking; (ii) dust from exposure; (iii) dirty utensils. The final product is indeed *so-called* milk, but it is milk which is now serving as an almost ideal culture medium for a large and rapidly increasing number of bacteria of all sorts, many of them pathogenic, particularly tubercle bacilli, streptococci and B. coli. Added to these are colouring matter of little food value, vegetable detritis, etc., in the form of excrementa bovina, popularly, but not accurately known as "Dark Returns."

The extent of this contamination may be exemplified by the result of the Clean Milk Competition for Kent for 1923. The entrance to this competition was voluntary, and naturally only those farmers entered who had taken some trouble to produce a clean article. The first example of milk[1] sent by one herd (No. 11) contained no less than twenty-one million bacteria per c.c., including many B. coli; indeed, the latter were obtained from 1/100,000 of a c.c. of milk in some cases. One must speculate on what the result would be in establishments where no great care is taken. It is not necessary to examine very many samples of milk nor to inspect many farms where milk is produced commercially, to be convinced that these statements are *not* gross exaggerations of the conditions existing in this industry, and, moreover, there is no doubt they will remain unchanged until the danger is more fully appreciated.

Let us contrast with this the deliberate and hygienic measures adopted in clean milk production under the Government's licence and supervision. There are four grades recognised by Milk Special Designation Order of 1923[2]:

(1) Certified (Grade A (Certified) now withdrawn).

(2) Grade A, Tuberculin Tested.

(3) Grade A.

(4) Pasteurised.

The certfied rules are mainly:

(1) A register of all animals must be kept and each animal suitably marked for purposes of identification.

(2) Every animal must have passed the tuberculin test, and continue to do so every six months.

(3) The herd must be isolated from all other untested animals.

(4) The herd must be certified by a veterinary surgeon as free from all diseases which might affect the milk injuriously.

(5) All milking to be done with dry, clean hands or with the aid of a little petroleum jelly as a lubricant.

(6) Before a licence is granted the farm is inspected, and a satisfactory number of points must be obtained, having in mind the general condition of the cow houses.

(7) Milk must be bottled and sealed on the farm immediately after production for delivery to the consumer.

(8) It must have the name of the farm and day of production printed clearly on the cap.

(9) The milk at any time before delivery to the consumer must not contain more than 30,000 bacteria per c.c., and not any B. coli in 1/10 c.c.

Grade A, Tuberculin Tested.—This requires, broadly, that the cows should be tested every six months and all reactors removed.

Grade A Milk.—The cows of the herd are examined clinically every three months, and any animal showing evidence of disease which is likely to affect the milk injuriously is isolated and the licensing authority informed. Milk taken at any time before delivery to the consumer must not contain more than 100,000 bacteria per c.c., and no B. coli in 1/100 of a c.c.

Pasteurised Milk—

(1) This milk must be retained at a temperature of not less than 145° F. and not more than 150° F. for half an hour. Then cooled to a temperature below 55° F.

(2) It must not be treated twice.

(3) Each vessel shall bear the words "Pasteurised Milk."

(4) Before delivery it shall not contain more than 200,000 bacteria per c.c., with no reservative statement as to the nature of organisms present.

Nonconformity with these specifications renders the producer liable to loss of the licence, and a fine of £5 for a first offence and £50 for a second.

The measures necessary to keep the bacterial count below 30,000 per c.c., and with no B. coli present, will be best shown by describing the routine practice of a farm producing such milk.

The long hair from the cow's udder, tail and quarters is cut close every month; this assists materially in overcoming the soiling of these parts with fæces, etc., which is very abundant if this precaution is not adopted, and it also helps the cowman by facilitating and rendering more efficient the grooming and washing the cows receive on coming in from the fields. This grooming consists of a thorough curry-combing from head to foot, followed by a wisping with a wad of damp hay. This procedure removes all dung, mud and loose hair from their coats and is apparently appreciated by the animals, and probably contributes to their improved health.

After this stage the cows are removed to another shed, which has previously been hosed to lay the dust. The udders are washed with plenty of cold water. In several establishments the hose is turned on to the udder without any untoward symptoms developing. Whatever the method adopted, a thorough drying of the udders with a clean cloth is essential. The milkers wash their hands, put on white smocks and caps, and then milk into domed sterilised pails.

Immediately on completion of the milking of each cow they remove the milk, weigh it and record the yield, and place it in the cooler forthwith. Efficient cooling is very important, as any organisms present in the milk, being in a suitable pabulum for growth, would multiply rapidly if left at body temperature. As the milk completes the circuit of the cooler it is run into sterilised milk bottles and sealed down with sterilised plugs.

The thorough washing and sterilising of the utensils and milk bottles is a matter that receives considerable care. All utensils are placed in a tank of running water, while the milkers have their breakfast or tea, as the case may be. On returning each article is wiped under the tap, often with the aid of a mechanical brush, and passed on to the next hand, who washes them with hot water and soda. They are again rinsed by a third hand under a pressure tap and put into the rack. When everything has been washed they are all placed in the steriliser upside down and the steam turned on. The temperature is raised and maintained at 212° F. for twenty minutes. The steam is turned off and the whole outfit left in the steriliser until required.

Discussion.—If it can now be granted that the milk, as usually produced in this country, is not the delightfully pure fluid that one is led to believe by the advertisements posted everywhere—liquid sunlight, etc.—then it will be interesting to discuss what effects the flora of this biological—one is almost tempted to say Zoological—product is likely to bring about after consumption. For convenience of description these effects will be considered under three heads:

(1) Specific diseases, other than T.B.
(2) Infant diarrhœa and toxæmia.
(3) Tuberculosis.

Specific Diseases other than T.B.—One only needs to mention the fact of milk acting as a passive carrier of diseases—scarlet fever, diphtheria and typhoid, as was instanced in the Chorley outbreak of para-typhoid fever[3]—to appreciate that, apart from any steps the Medical Officer of Health may take, the very hygienic principles incumbent on producing clean milk would also lessen the risk of recurrence of so serious an outbreak as that cited.

Infant Diarrhœa.—Hutchinson[4], referring to this condition, says: "I cannot exaggerate the importance of this disease as a scourge of infant life. Recent returns of the Registrar-General show that out of 22,000 deaths from diarrhœa, taking the country all over, 17,000 occurred in children under one year old." This author then goes on to state that he considers there are three main predisposing factors in this disease:

" (1) The sterilising power of the child's stomach is very small; it secretes but little hydrochloric acid, and organisms swallowed with the food stand a good chance of running the gauntlet of the stomach and setting up irritation in the intestines.

" (2) The children are fed mainly upon milk, which is anything but a germ-free fluid.

" (3) That infants are particularly liable to chill.

"Against these you must fight if you wish to prevent it (diarrhœa)."

It is well known that bacteriologists have not found any micro-organism which is so constantly present that we may be justified in looking upon it as the specific cause of this disease. One must, therefore, look for some error in the diet or hygiene of the infant. What more blatant defect in hygiene could one have than this condition of the milk?

In the natural state the child is breast-fed, and, if the mother is moderately careful, the infant has an almost germ-free diet. Granting that under the present conditions it is not always possible to breast-feed, it would appear to the author a curious change of thought to advise that this child be put on a diet laden with organisms, when by a little care the natural conditions can be imitated fairly closely. Considering also the precarious position of an infant at this early stage of its existence, is it astonishing to find that its natural resistance is liable to break down when fed on a fluid teeming with organisms and their products, obtained directly from another animal. Yet the view has been expressed by at least one authority: " That it was the very presence of this miscellaneous collection of organisms, stimulating the body mechanism for the production of antibodies in the individual, that fitted him for the fight that was to come."

Allowing that such is the case *with those that survive*, do the advocates of this line of thought seriously consider that the administration, before Nature has prepared the individual for such a fight, of actual living cultures of pathogenic organisms can possibly be justified on biological, physiological or any other grounds?

Tuberculosis.—It is generally accepted, since the Royal Commission, that there are two varieties of tubercle bacilli pathogenic to man, namely: (*a*) The human, (*b*) the bovine. The apparent relative frequency of either class varies considerably with the authority quoted. But, after a careful examination of a number of reports, the author has been led to believe that at least 30% of fatal cases in children under two years of age are due to the bovine type. John Guy's[5] opinion of the danger of the bovine type is expressed in his statement:

" Another great means of distribution of T.B. is the milk of tuberculous cows. The extent of this peril may be indicated when it is stated that at least 40% of milch cows in Great Britain are infected with T.B., and that a great number of those supply milk containing tubercle bacilli. The germ may gain entrance to the milk by the udder of the cow being the site of a T.B. lesion or because the tuberculous process is disseminated through the body, and the bacilli circulating in the blood are excreted by the milk glands. Again, the bacilli may be discharged from T.B. ulcers in the intestines and the infected fæces gain entrance to the milk. To those familiar with conditions under which many of our cows are kept, and with the milking methods commonly in use, it will be at once appreciated how easy it is for infected excreta to gain entrance to the milking pail. Thus, to a very great degree, the prevention of the distribution of T.B. is to be secured by the control of the consumptive patient—the tuberculous cow."

Sir Henry Gauvain,[6] speaking at the National Association for the Prevention of Tuberculosis, at Birmingham, said:

" A number of very young children, at an age when bovine infection is especially prone to occur, die of either primary tubercular meningitis or rapidly disseminated tubercle. The percentage of bovine infection of these has not been worked out on a sufficiently large number of cases to afford reliable data, but it is reasonable to assume that it must be *very high*."

From these quotations it will be gathered that tuberculosis of the bovine type is a *real* and not a hypothetical danger, especially in the case of infants, for it is now generally accepted that the younger the child infected the greater chance the disease has of progressing to a surgical, or even a *fatal*, conclusion. It would appear, therefore, that one must exercise particular care to avoid infection at this period. Consequently, it must be admitted to be unfortunate that it is impossible to state the precise doses, if any, of T.B. which is administered at any one time, but as the milk immunisation scheme is not founded on dosage of any exactitude it is perhaps impudent for one to attempt standardisation. It would seem generally understood, however, that two or three glasses of a fully-developed culture are intended to be taken daily over some years. In the case of weakly persons, especially those suffering from influenza, and children this amount should be increased, and if the patient has already contracted T.B. the largest possible amounts should be administered—apparently in homeopathic hopefulness.

Yet one learns with astonishment from certain quarters that clean milk precautions are unneces-

sary because it is stated that "a mild attack of the bovine type would cause anti-bodies to be formed, which would render the individual immune to subsequent attacks." One would like to ask: Do the advocates of this line of thought consider that an infant is at the best possible period to deal with such an attack? Have they any reason to believe that a child, which has recovered from an attack of the bovine type, later becomes immune to the human type? Cases of infection of both types in the same individual have been recorded, which would tend to disprove this hypothesis. But unless such dual immunity *does* exist, there would be no point in protecting the individual, at some considerable risk, against the bovine type if the source of infection, T.B. milk, were totally eliminated from the diet.

If, however, this immunity is to be obtained at all costs, surely the more rational method would be to obtain it by a series of carefully graduated doses of attenuated or dead bacilli, as has been done in France by Calmette,[7] and would certainly be of greater pecuniary benefit to the practitioner. The whole situation is summed up admirably by Guy[8] when he says: "The damage done by the bovine bacillus is *real*; its protective value problematical."

It would appear then, to the author, absolutely criminal for anyone with a scientific training to defend the production of a possible but dubious immunity by giving at irregular intervals an unknown dose of specific bacilli, plus an equally indefinite, but more constant, dose of a large number of other pathogenic organisms at a particularly susceptible period. Is there any other sphere in which so unscientific a procedure has the general approval?

In conclusion, gentlemen, although it is asserted by farmers and other not disinterested people that the lactiferous suspension of living bacilli obtained by a judicious use of excrementa bovina has a very high value, it has to be admitted that there are a certain number of untimely deaths during the process of immunisation. This is perhaps due to the use of an heterologous species such as bos, and better results might be obtained by the use of excrementa humana, which is everywhere obtainable. This has indeed been used to a limited extent by the Hakims in India, but figures are lacking which would enable us to judge of the result. It is, however, a matter which should receive further attention from those competent to deal with such subjects.

With reference to T.B., the author would emphasise the fact that it is not an impracticable proposition to free this country from bovine tuberculosis and remove the risk of infection and this cause of death to many thousands of infants yearly; for the mechanism is already in the hands of the veterinary profession,[9] but he would also emphasise the fact that this happy prospect is not likely to be realised in this country unless, and until, the medical profession appreciate the *appalling* conditions under which much of our milk is produced, and interests itself sufficiently in the question to educate the layman to be willing to provide the necessary sinews.

REFERENCES

1. Report: "Kent Education Committee" in conjunction with "The Kent Milk Recording Society" 1923.
2. Statutory Rules and Orders. 1923. No. 601, also Memo 77/Foods.
3. Report on Public Health and Medical Subjects. No. 30.
4. Lectures on Diseases of Children. Robert Hutchison. P. 58. 59
5. John Guy. Pulmonary Tuberculosis, Diagnosis and Treatment. P. 33/4.
6. Sir Henry Gauvain. Report: National Association Prevention T.B.
7. Franco - British Medical Review. Oct., 1926. Vol., 3. P. 1.
8. John Guy. Pulmonary Tuberculosis, Diagnosis and Treatment. P. 38.
9. Bang's Method of Elimination.

Also "B.M.J." "Lancet," "Veterinary Record," "Journal of Comparative Pathology," "Hewlett's Bacteriology," etc.

WARD CONCERT.

Christopher.

A VERY enjoyable concert was held in Christopher Ward on Tuesday, December 28th. The Ward was simply, yet effectively decorated, and was seen to great advantage.

Mr. Clay Thomas, the famous baritone, very kindly brought with him many well known artistes, and their efforts were greeted with much applause.

Delightful songs were rendered by Molly Seymour, Miss Beesley, Clay Thomas, Cecil Harring and Fred Curtis, while Vera Drake was a splendid accompanist. Kathleen O'Hagan played some very fine violin solos and Nellie Norway was at her best with the bells.

An excellent tea was served by Sister and the Nursing staff.

We offer our best thanks to Mr. Clay Thomas and his party for their splendid and successful effort in entertaining the audience.

A Cruise to the Schelde in a 5-Tonner.

Modified from a Log which was awarded the "Bengorm" and "Stubbs" Challenge Cups for 1926 *by the Royal Corinthian Yacht Club, who have kindly consented to the publication of this narrative.*

By E. H. ROCHE.

Continued

Saturday, July 24th

A FINE morning. The glass was still falling —30 at 9 a.m. and 29.97 at 11 a.m. The wind was light from E.S.E., freshening slightly. The tides run strongly at Antwerp and, as the ebb did not set in till 4.20 p.m., we took things easily in the morning and later Tupling and Wood went ashore for the tedious but necessary task of foraging, while I stayed aboard and cleaned ship. There is a great deal of commerce at Antwerp and ships from all parts of the world arrive and depart daily, and one found absorbing interest in just watching the ships and trying to identify their various flags.

We got under weigh at 4.30 p.m., bound down river without any fixed destination. We thought of going possibly to Hoedekenskerke or bringing up in any sheltered anchorage on the way. The barometer had fallen to 29.8 and the wind presently veered to the S.W. We thus sailed down the first reach one point free on the port tack. But the sky darkened rapidly and the air had a warm clammy feeling as though something uncanny was brewing. Suddenly the wind shot round to the orth and blew so strongly that we were immediately compelled to take in two reefs. At 6 p.m. the barometer had fallen to 29.76. At 7 p.m. the evening looked dark and threatening. The wind being then N.W. and dead foul and as the ebb tide was nearly spent, we decided to run in to the weather bank and drop anchor for the night. We were then in latitude 51° 21′ 30″, just across the Dutch frontier.

Sunday, July 25th

Looking out at 5 a.m. one was greeted by a sombre and dismal spectacle. The sky was overcast with low leaden clouds, and visibility was everywhere limited to a few hundred yards, beyond which sky and land became indistinguishable in a grey mantle of rain. The glass had fallen to 29.55. The wind was fresh from the west—dead foul for a passage down river. High water Flushing was at 1.37 a.m., so that the tide would turn at Flushing at 2.52 a.m. and Antwerp at 4.42 a.m. But as we were then some 13 miles below Antwerp we estimated that the ebb in that part of the river had set in at 4.12 a.m., and would continue in our favour till about 10 o'clock. We debated at some length whether it was worth while getting under weigh. It was clear that if we neglected the early morning tide we should probably be unable to move from that spot until 4 o'clock in the afternoon, when there would be very little hope of making Ter Neusen by daylight. So eventually at 5.15 we definitely made up our minds to turn out. We took time to cook and consume a good hot breakfast, and then came out in oilskins and sou'westers to reef the sails in a heavy driving rain. My oilskin selected this occasion to catch in a cleat on the under surface of the boom and rip down the back from top to bottom. Thereafter it may have given some protection to my arms, but very soon a wide area of my back was drenched to the skin. Wood and Tupling fared a little better, but all got to some extent wet. It is quite possible to sit in heavy rain and keep perfectly dry, but working in it is a very different matter, and I have yet to find an oilskin that will stand the test. We found shorts and bare feet the only satisfactory dress under those conditions.

Getting our anchor at 6.50 a.m. we headed N.N.W. down the first reach of the river, laying the course comfortably on the port tack. Visibility was still obscured by the rain. The glass was 29.52—still falling. It was blowing strongly from the west, and we were very glad of our two reefs and small jib. After half an hour we reached Bat, where the river took a sweep round to the westward, and later to W.S.W. From that point it was a hard beat to windward all the way to Walsoorden—a distance of 7 miles. Wind against tide threw up a steep sea in the channel and it was hard work to forge our way through it. It was 8.30 a.m. before we made Walsoorden, so that there remained only 1½ hours of ebb tide. Ter Neusen was then 10 miles distant, and with the wind foul we felt very doubtful of reaching it in the time. The prospect of beating against both wind and tide, even if we could have made any progress, was altogether too grim to contemplate, and as there was no other good anchorage on the way we decided to avail ourselves of the excellent shelter afforded by the high sea wall of Walsoorden

and there await the afternoon tide. We hoped also that the wind might alter to a more favourable quarter—indeed, it could scarcely change for the worse. We therefore ran in against the weather bank, which was quite steep and anchored in 3 fathoms, about 50 yards from the entrance of the harbour. The latter dried out at low water.

A hot meal and a change of clothes were our next and most urgent needs.

The weather improved considerably during the day. The continuous downpour of rain, gradually gave place to occasional showers which blew up with very little warning from the west, wrought great havoc while they lasted, and passed off quickly leaving a clear sky overhead. In the afternoon the wind was still strong from the west, and we thought it advisable to shorten the stay sail and take in a third reef in the mainsail. At 5 p.m. we got under weigh again for Ter Neusen. As before, it was a hard beat to windward and we had to drive her through a fierce sea every inch of the way. We took a narrow channel to the south of the Odenisse Bank and then punched a laboured course to windward down the Gat van Odenisse. Very rough water was encountered there and we had to let her off considerably to keep way on. It was hard going, but we plugged her at it and eventually entered the Pas van Ter Neusen. We had to beat in that reach also, but the water was smoother, and for the first time we began to make really good progress. At 9.15 p.m., when the ebb tide was nearly spent, we entered the west harbour of Ter Neusen. We drew up in a sheltered backwater at the south-west corner of the harbour and moored bow to the last dolphin, stern to anchor. The berth was a very comfortable one, marred only by the smell of stale seaweed at low water, and we slept long and soundly on an even keel. There are two harbours at Ter Neusen, but the west harbour is the only one that yachtsmen should consider. The east harbour is a little nearer the town, but it dries out in places, and the deep parts are usually very congested with fishing boats.

Monday, July 26th

It was a fine morning and the glass had risen to 30.03. The wind was very light from the north-west. High water Flushing was at 2.45 p.m. The ebb at Flushing therefore set in at 4 p.m. and at Ter Neusen, 12 miles higher up, at 4.30 p.m. Thus, with the greater part of the day in front of us, we got up at leisure and wandered ashore in due course to explore the town. We had an excellent lunch at the Hotel des Pays Bas, where a portly waiter who spoke perfect English ministered to us. He was clever enough to remember our previous visit to Ter Neusen three years ago, and on learning that we needed provisions he very kindly offered to escort us to the best shops, where he interpreted and saw fair play. He had been to sea as a steward and spent many years in British ships.

Ter Neusen was the first Dutch town we had ever seen, and on the occasion of our first visit we had been charmed beyond measure by the quaint and fantastic dresses, the spotless cleanliness of the houses, shops and streets, and the genuine good-heartedness of the people. We had enjoyed our stay intensely, and our memories of the place were as indelible as they were delightful. On our second visit, however, we were frankly disappointed. What had been a veritable wonderland three years ago

In The Beveland Canal.

had become just an ordinary Dutch town full of very ordinary people. Can it have been that a bad harvest had cast a wave of depression over the town or was it ourselves that had changed? Was it possible that our subsequent familiarity with Dutch manners and modes had made them less interesting to us, and that when no longer able to hold us with the spell of novelty they had lost thereby the greater part of their charm?

We gravitated towards the boat again during the afternoon and, shaking out all our reefs, we got under weigh for Brakman Creek at 4.45 p.m. on the first of the flood. The wind was light from the north. Beating out of the harbour we carried

a beam wind for about 2 miles down the river to the entrance of Brakman Creek. The shallowest part of the Creek is at the entrance, but it is very well buoyed and carries two fathoms at low water. The flood was just beginning to gain strength, and we carried a good tide and a following wind up the Creek. At 6 p.m. we anchored in 3 fathoms about a hundred yards N.E. of the last red buoy. A short distance beyond that point the deep water ended abruptly. Tupling put on gum boots and rowed ashore to explore the mud and examine the fauna that flourished in the numerous pools left by the tide. At low tide the Brakman is a narrow Creek bounded by high banks of mud, but at high tide one is surrounded by an expanse of shallow water about 2 miles wide. It affords good shelter in most winds, but is somewhat exposed to the north and north-east.

Tuesday, July 27th

A fine morning. The wind was moderate from N.N.W.—dead foul for Sloe Creek, which was our destination for the day. High water Flushing was at 3.10 a.m., and from that we deduced that the ebb would set in at Brakman Creek at 4.50 a.m. and that the tide at Sloe Creek would be slack at 10.55 and begin definitely to flood about 11.15. So we shook out all reefs and got under weigh at 8.35 a.m., leaving ourselves 2½ hours to reach the entrance to Sloe Creek. The distance was about 10 miles, but though the wind was foul the tides were strong and we fully expected to make it in the time. We followed the Pas van Ter Neusen across the river to Borsele. We had to beat the whole way, but as we approached the weather shore the water became calmer and we made good progress. Slack water found us still 2 miles from Sloe Creek, but the wind freshened a little and we succeeded in making the entrance at 11.15 before the flood had gathered sufficient strength to thwart us.

We ran up the creek between the black and red buoys, and as there was considerable difference between the soundings shown on the British and Dutch charts we took the opportunity of going some distance up the creek and testing them with the lead. The British Admiralty chart of the Schelde (1914) showed 14 ft. as far as the fifth red buoy and a good channel at high water leading across the Sloe Sands into Zandkreek. The Dutch chart (1922), on the other hand, showed only 5 ft. of water at the third red buoy and an impassable bank of mud about 2 miles wide separating Sloe Creek from Zandkreek. We very soon discovered that even the Dutch chart by no means overstated the depth, and the English chart of this region was grossly inaccurate. Our keel must have grazed the bottom several times, but fortunately we did not stick. Turning about 200 yards from the fourth red buoy we ran back and anchored in 2½ fathoms close to the weather bank North of the second red buoy. Sloe Creek was not the only place where a serious difference was found between the two charts. For example, at a point a few miles above Bat the British chart showed a communication at high water between the East and West Schelde, whereas according to the Dutch chart the two rivers were separated by at least a mile of dry land. It seems that the Schelde is now a very old river, and that every year the signs of its great age become more apparent. For countless centuries it has drained and scoured wide areas of land, but now the products of its own activity are silting up in ever-increasing deposits about its mouth, blocking up the channels and holding back the stream. And every check to the force of the stream causes yet more abundant deposits, and so the process goes on.

We spent a little time doing odd jobs with marlin and cod line and then went ashore. Finding a delightful bank of soft grass leading up to the sea wall we there reclined and basked in the sun for the rest of the afternoon. The evening was calm with a glorious red sunset.

Wednesday, July 28th

The sky was heavily overcast and the wind moderate from N.N.W. The tide in the Schelde would cease to ebb at 11.15 a.m., but as we had only 3 miles to sail we did not hasten our departure, and eventually got away at 9.45 a.m. Carrying a beam wind out of the Creek we sailed close-hauled down the river to Flushing. Entering the harbour at 10.45 a.m. we lowered sail and swept into the lock, where the watermen helped with the towline. All canals, locks, and bridges are free in Holland, but lockmen who render valuable assistance deserve—and expect—a small coin. The only formality is that at the head of every canal the skipper must go to the Harbour-master's office while his boat is in the lock and state the name of his boat, whence he has come and whither he is going. Towing through the lock we swept clear and, setting mainsail and jib, made our way round into the first basin on the starboard hand. There we anchored in 5 fathoms at the northern extremity, where the basin comes to a dead end.

In the afternoon we went ashore to explore Flushing for the second time and to fill our larder in preparation for the long passage to England. Flushing was no longer in the throes of a fair, and every one seemed glad to be rid of it. Shops certainly were much better stocked and business seemed brisker in every quarter.

We dined ashore and returned early to the boat. Then, having stowed the provender, we lashed on the canvas cover of the dinghy to save time in the morning and turned in shortly after 9 o'clock.

Thursday, July 29th

Looking out at 5.45 a.m. one's heart sank to behold a strong westerly wind and a leaden sky, raining heavily and steadily without the slightest break as far as the eye could see. But it was imperative for us to be in London on the 31st, and we were therefore determined to make a start. High water Dover was at 2.56 British Summer Time.* Thus, the ebb tide in the Schelde would begin at 6.5 a.m. and the Dover Stream turn to

Fishing boats at Flushing.

the westward at 10.10 a.m. Intending to pass out through the Galgeput on a course to Harwich we decided to get under weigh at once so as to carry as much as possible of the ebb tide from the Schelde, which runs strongly for at least 10 miles into the North Sea. So, after a good breakfast, we got our anchor at 7.20 in the heavy rain Passing through the lock without delay we made the harbour mouth at 8 a.m. The wind was moderate from W.×N., and it was still raining heavily. Indeed, rain and head winds were becoming almost a feature of the cruise. In the Schelde we were further distressed to find it coming up thick from windward, and in a very short time the visibility was so poor that we could but dimly see either bank of the river. The Westcapelle fog signal was working and a vessel at sea was sounding its horn. The glass was falling rapidly. The wind was increasing from W.×N. and throwing up a boisterous sea against the tide. What a day for a passage to England! We, however, were positively determined to get home, and we knew moreover that all our gear was sound—that the sea anchor could be relied upon and that the dinghy with its new canvas cover was sufficiently insured against swamping. So we grimly set our teeth and, solemnly sweating up the halyards threw out our challenge to wind, rain, sea and fog and dared them to stand in our way. The more formidable the dragon the more resolutely did St. George gird on his armour and ride forth to battle.

As the fog seemed to be getting thicker to windward we gave up the idea of beating out in the narrow waters of the Galgeput and decided to make our exit through the Fransche Pass, leaving all the banks on the starboard hand. Presently the mist began to clear slightly and the wind freshened and veered to N.W.×W. We were thus able to lay a course W.×N. down the Wielinger Channel. At 8.30 a.m. Flushing windmill bore E.N.E. and Neuve Sluis light bore S.E.×S. We fixed position on the chart and streamed log reading 11.3. It was still fairly thick to windward and not knowing when we might be deprived of all visibility we fixed position at intervals of about half-an-hour all the way to the Wandelaar Lightship. We divided the time into watches, taking four hourly watches by day from 9 a.m. to 9 p.m., and three hourly watches by night from 9 p.m. to 6 a.m. We began to feel the Dover Stream at 10.30, and after that our progress down the Wielingen Channel was very swift. The wind was freshening steadily and we were sailing close-hauled on the starboard tack. At 11.45 we passed within about 100 yards of the Wandelaar Lightship, and we were then driving forward under a press of sail. Heavy sheets of spray were flying, the lee gunwale was almost continually awash and occasionally, as we plunged into the trough, green seas came into the open cockpit. Looking across to the Lightship one was amused to see the entire crew assembled on the deck gazing upon us in open-mouthed wonder with that "mad Anglais" expression written only too plainly upon their faces. As we passed we received from the younger members of the crew a greeting in which some entnusiasm was

*We kept our watches set to British Summer Time throughout the Cruise and no other time is referred to in this log. Dutch Summer Time was about 20 minutes later.

mixed with wonder; but the aged skipper, raising his hand to the salute, waved his farewell with all the solemnity of a priest performing the last rites. The log read 22.9.

Continuing W.×N. we began to make rather heavy weather, and with the glass falling slightly and the wind increasing we thought we should be more comfortable with less canvas set. So we hove to and took two reefs in the mainsail and changed to the small jib. We did not, however, trouble to batten down the cockpit. We were abreast of Ostend at about 1 o'clock, but after that we began to lose sight of the coast line. By 3.30 p.m. we were about 1 mile N.W. of the black knobbed buoy marking the channel between the eastern ends of the Outer Ratel and Cliff d'Islande Bank. The wind then backed slightly and headed us off to the West, a course which would have brought us to Dover. We therefore went about and headed N.W.$\frac{1}{2}$N. on the port tack. The log read 34. At 5.25 p.m. the West Hinder bore W.$\frac{1}{2}$N. about 1 mile. We reckoned this to be a reasonably accurate fixation of our position and marked it on the chart Log. 38. The glass was now rising (39.17), the fog had cleared completely, and the wind was falling away. We shook out our reefs.

The Dover Stream became slack at 9.30 p.m. and we then worked out our position. The Log read 47.6, so that the distance travelled since the last fixation was 9.6 miles, and our course had been N.W.$\frac{1}{2}$N. During that time the tide had carried us 4 miles at 45°. These data expressed as simple straight lines upon the chart readily showed that our position by dead reckoning was: Lat. 51° 31′ 40″, Long. 2° 19′ 40″.

During the night the wind became very light and at times disappeared altogether, leaving our sails to flap as the boom swung from side to side. Occasionally a light air would puff up and raise our hopes, but it never varied in direction and always fell away after an hour or so. The moon, which was getting towards the first quarter, rose during the evening, and somehow added colour to the lonely midnight watch. By 3.40 a.m. at slack water of the Dover Stream the log had registered only 7.9 miles in 6$\frac{1}{4}$ hours. A log cannot be expected to register accurately at these slow speeds for the rotatory force acting upon the vane is then greatly reduced and the resistance in the recording apparatus, which is composed largely of friction and is therefore largely independent of speed, becomes relatively much greater. So when the speed falls below about 3 knots the effect of resistance becomes definitely appreciable and the log under-registers. That ours seriously mislead us on that occasion was conclusively proved before many more hours had elapsed.

We followed the rule of plotting our position on the chart every 6$\frac{1}{4}$ hours at slack water of the Dover Stream. Thus, estimating the tide at 6$\frac{1}{2}$ miles S.W., our position by dead reckoning at 3.40 a.m. was: Lat. 51° 31′ 10″, Long. 2° 4′ 30″.

Friday, July 30th.

Dawn on July 30th found us ambling along N.W.$\frac{1}{2}$W. in a light northerly breeze. The glass had risen to 30.2 and the sky looked fine.

At 10 a.m. the log registered 17. Log distance 11.6 miles N.W.$\frac{1}{2}$W. Tide 6$\frac{1}{2}$ miles N.E. D.R. position: Lat. 51° 41′ 20″, Long. 1° 35′ 30″.

At 11.15 we identified the Kentish Knock Lightship and the red knobbed buoy at the northern extremity of the Bank. The sea was calm, and one was able to take exact bearings with the prismatic compass. The lightship bore 190° and the buoy 262°. We also picked up the Longsand bearing 13°. From those data we fixed position: Lat. 51° 42′ 45″, Long. 1° 40′ 20″. and it was there that our faith in the accuracy of the log was rudely shaken. For the log then registered only 18.8 miles.

Thus, the log distance since 10 a.m. was only 1.8 miles N.W.×W. Allowing 2 miles S.W. for the tide the position appeared by dead reckoning to be: Lat. 51° 40′ 20″, Long. 1° 48′ 40″.

Thus, the dead reckoning placed us 6 miles S.E.$\frac{3}{4}$E. of the true position. It will be seen that the direction was approximately correct, and the tides being mainly at right angles to the course almost the whole of the error could be attributed to the under-registering of the log, and that error undoubtedly occurred during the light airs of the previous night.

Realising our position, about two miles north-east of the Kentish Knock we were at first in doubt whether to go round to the north of the Long Sand and run down the King's Channel or to head S.W. for the Fisherman's Gat and there make our way N.E.×N. across the Sunk and Barrow Sands into the East Swin. The tide was then flooding strongly. The former course required a beat of 5 miles against the tide to skirt the Long Sand, and as that might have taken many hours we had almost decided to make for the Fisherman's Gat when the wind settled the matter for us. Indeed, it fell so light that we could not make against the tide, and were actually compelled to pass round to the south of the Kentish Knock. There we had a novel experience. We headed S.S.W. between the Lightship and the bank and, with a watchful eye on the breakers, we were feeling our way with the lead, keeping as close as we dared to the edge of the bank. The tide was

setting S.W.×W., sweeping slightly across it, and we therefore had the anchor ready to cast at a moment's notice in case the wind should weaken still further and leave us in difficulties. It was when we were about opposite the middle of the bank that the keeper of the lightship became alarmed at our position and hoisted a danger signal. This we did not see, and continued blissfully on our course. Presently he became still more alarmed and astonished us by firing an enormous gun. Even then I refused to believe that he was endeavouring to save us from destruction and, thinking he must have need of our services, I decided to gybe round and run out to him. He thereupon lowered the signal. Presently the wind fell very light and when it became clear that we could not possibly make the lightship against the tide we gave up the chase and, gybing once more, we resumed our passage round the south of the Kentish Knock and across to the Fisherman's Gat. I have since felt very grateful to that lonely but vigilant watchman on the lightship for his kindly interest and concern for our safety, and I have often wondered whether I sufficiently appreciated his action at the time or realised quite fully the dangers of the Kentish Knock.

At about 2.30 p.m. a light breeze sprang up from E.×N.—the first fair wind we had had since leaving Antwerp. We found the Fisherman's Gat at 3 p.m., an hour before high water. Setting course N.E.×N. we crossed the Middle Sunk and passing between No. 6 Chequered and No. 5 Red Buoys in Barrow Deep we cut across the tail of the East Barrow, allowing the ebb to carry us a little further to the north than the depth of the water necessitated. Thus, at 8 p.m., we found ourselves close to the Heaps Buoy, where the waters of the East Swin and Middle Deep enter the King's Channel. Allowing a point for the tide we headed W.×S. and, setting spinnaker for the first time, made fair progress. But the tide held us strongly and darkness overtook us before we had entered the Whitaker Channel. Steering mainly by the occulting light of the Whitaker Buoy we felt our way with the lead across the tip of the Foulness Sand discerning faintly the shadowy form of the Whitaker Beacon on the port beam. We then entered the Channel and kept the bouy bearing E.$\frac{1}{4}$S. over the counter. The wind backing to the north we had to take in the spinnaker, but rejoiced in a beam wind all the way to the Crouch. Steering mainly W.×S. we followed the Channel with the lead and soon picked up the flashing light of the South-West Buxey Buoy. Passing the Buxey we continued to follow the channel with the lead, keeping the buoy bearing E.N.E., and at midnight the rising moon showed us dimly the banks of the Crouch on either side. We continued our course up the river, but at 2 a.m. on July 31st the wind backed to the north-west and we could no longer make way against the ebb. So we rounded up and anchored under the lee of the north bank about half-a-mile below Burnham. Thus, in our passage from Flushing, we had been 43 hours under weigh and had traversed 127 miles. Hastily stowing the sails we repaired to the cabin and slept long and soundly.

As we beat up to Fambridge on the afternoon tide we looked back with unbounded satisfaction upon the places we had visited and the seas we had traversed. We remembered setting out with some doubt in our minds as to whether the Schelde would come up to expectations and repay the time spent upon its exploration. After fourteen days of delightful sailing we agreed emphatically that it had. For when one considers the extent of sheltered water that it offers, the wholesome and pleasant country that it traverses free from the grime and smoke of industrial towns, and the true and fresh winds that abound there, one has to regard it as a first-class cruising ground. Indeed, for small cruisers it is perhaps the most attractive of all the sheltered waters within a reasonable distance of Burnham.

Guy's Hospital Gazette.

(ESTABLISHED 1872.)

A Journal of Hospital News, Medicine, Surgery, and Dentistry.

Published on alternate Saturdays. Price **9d.**

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including "Directory of Guy's Men (Medical and Dental)," **12s. 6d.** post free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone, Hop 1086.

Proposals for a Bridge Competition.

THE GAZETTE has lately tried to introduce non-medical subjects into its pages. Recently there was a successful Nurses' Crossword Puzzle. Now it is to be Bridge.

This week the topic for the discussion is to be "Suit Values." Roughly speaking, this can be summed up by saying it takes three no trumps, four spades or hearts and five diamonds or clubs to make a game starting from scratch. It is obvious that it is better to play the hand in no trumps or in a major suit if possible, but there are many exceptions.

The following hand was dealt—to the dealer—in the College recently :

Spades—* *
Hearts—* * *
Diamonds—A K Q J * * *
Clubs—A

There was considerable argument about it. The declarer went three diamonds. Personally, I should have gone one diamond, especially as a call of one in a minor suit is looked upon as a request to your partner to go into no trumps if possible. The reasoning for going one as opposed to three is that in diamonds there are eight tricks. This leaves five tricks remaining, and the likelihood is that your partner will win two. The result is that you get four diamonds, but do not make game. Played in no trumps you have eight certain tricks—that is, as certain as if played in diamonds—if only your partner can produce one trick before your opponents have made more than four. If he cannot do this, a "pre-emptive" bid of three diamonds will almost certainly be over-called by your opponents by three or more of a major suit. There is always the chance of subsequently calling up to four diamonds. The thought of losing eight times honours in diamonds must be put up with if games are going to be won.

Consider the hand :

Spades—* *
Hearts—* * *
Diamonds—K Q J 10 * * *
Clubs—A

This is an entirely different proposition. Let us assume that one no trump has been called by the dealer and that the second caller has passed. Nobody would have any doubt that if the K. Q. J. 10, *, *, * was in a major suit, the correct call would be two of that suit. I maintain that the same applies to a minor suit. If it is more probable that ten tricks will be made in the major suits, it is almost as probable that eleven tricks will be made in a minor suit.

This leads one on to the vexed question of when to—and when not to—take your partner out of a no trump. This we will consider in the next number.

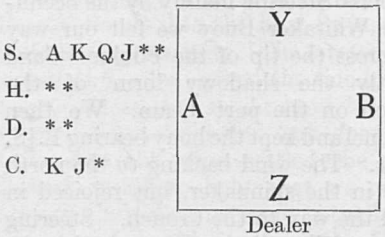
The Editor has asked me to arrange a Bridge Competition, to the winner of which a prize of a pack of Cards will be given. For this purpose it is necessary to have twelve hands on which there has been argument about the correct call. If readers will send hands which they consider suitable to

"BRIDGE,"
The GAZETTE Office,
Guy's Hospital, S.E.1

the best twelve will be picked out and published for the Competition. The hands will be judged by the votes of the competitors as, unfortunately, there is no one I know whose decision would meet with universal approval, and the prize will be awarded to the one whose list of solutions agrees most with the one computed from the most favoured solutions from those competing.

In sending the hands in please make Z the dealer and the other three players A, Y, B, in that order from left to right and, of course, always state the score.

The present tendency is to judge a player too much by his calling—too little by his actual playing of the cards. The hand below is given because it looked quite safe, but actually game was not made.



Dealer

The calling was : Z no bid, A one spade, Y two diamonds, B two hearts, Z no bid, A two spades—all pass. How ought A to play the hand after Y has led the three of hearts ? The correct solution will be given next fortnight.

Correspondence.

An African Case.

DEAR SIR,—I should like to report on a somewhat extraordinary case, if you think it worth while publishing.

On November 20th, 1926, I was called out to see a married European woman, æt. 38 years. She presented a typical picture of ruptured tubal pregnancy, and I called in the assistance of a neighbouring surgeon to operate. Her previous history was that for some four years she had suffered from "dyspepsia."

She has had no full time children born, but some half-dozen abortions. The longest period of pregnancy was in 1925, when she went six months and then gave birth to a still-born baby.

On opening her up a right intramural ruptured ectopic was found. The pelvis was full of blood. The uterus was full of small intra-mural fibroids.

The operation was performed on the dining room table of a farm house with a very mediocre light.

The right uterine artery was ligatured and a drainage tube placed at the lower end of the wound.

Apart from a day of post-operative colic and vomiting, all went well till November 29th—the ninth day.

Her temperature went up to 103.5°, and I found a collection of pus where the tube had been removed.

By irrigating with saline the pus had cleared up by December 9th. The temperature was normal, and the wound almost healed.

December 14th.—After four days normal temperature patient seized with severe rigor. One hour later temperature 103.5°. Stools clay coloured. Temperature remained steady for eight hours, then profuse sweating began and in two hours the temperature was normal.

December 15th and 16th.—Temperature normal. Stools clay coloured. Given calomel. No change.

December 17th.—Severe rigor, temperature again rose, now to 104°. This lasts eight hours and was followed by profuse sweating and fall of temperature.

During all this time there was no pain, and the wound was free of sepsis.

December 20th and 23rd were a repetition of December 14th and 17th.

One might have suspected malaria from the type of the attacks and the tertian variety, but the patient had never been near malarial districts. The spleen was not enlarged. Stools always clay coloured.

I made a diagnosis of *intermittent hepatic fever of Charcot* (due to the ball-valve action of a gall stone in the ampulla of Vater—see *Osler*, 9th edition, page 564).

On the night of December 23rd I gave two pills, the pill being of the following composition: Aloin gr. $\frac{1}{4}$, ext. belladon. gr. $\frac{1}{3}$ and ext. nuc vom. gr. $\frac{1}{8}$. This was with a view to dislodging the stone.

December 24th.—Some bile with the fæces. Four motions, which I carefully searched with a view to finding a stone. Nothing found. Temperature normal. Given calomel gr. iv.

December 25th.—Bowels acted well, with plenty of bile. Careful search of the fæces was rewarded by *finding a gall stone a little larger than a pea* Temperature normal.

December 28th.—Temperature has remained normal and patient now feels quite well. Stools normal.

I think the chief interest lies in the latter part of the case, and it is extraordinary that both illnesses occurred in less than one month.

I am,

Yours faithfully,

C. E. KEAST,

M.R.C.S., L.R.C.P.(Lon.).

P.O. Box 14,
Indwe, C.P.,
South Africa.
December 29th, 1926.

Old Guy's Men.

DEAR SIR,—As a keen reader of the GAZETTE for many years I am horrified at the discovery of any inaccuracy of statement in a journal which I have come to regard as practically infallible. While heartily joining in the felicitations offered to Dr. John Dixon as the doyen of Guy's men, I would point out that Sir David Maurice Sergeant, of Camberwell, whose name appears in the *Directory of Guy's Men*, 1927, very probably has the honour.

In his book *Australia*, published in 1923, he refers to himself as "an old man of 93," so that his natal year must have been 1830.

Yours faithfully,

Health Office, "1899–1905."
Tithebarn Street, Preston.
January 22nd, 1927.

[We receive the above letter with great interest and congratulate most heartily, Sir David on exceeding Dr. Dixon in fulness of years.—ED.]

Medical Life in India.

SIR,—I enclose a further sidelight on medical life in India.

Yours faithfully,
J. B. HANCE, Major, I.M.S.,
Principal Medical Officer, Jodhpur.

Jodhpur,
Rajputana.
December 4th, 1926.

(Copy)

To
The Principal Medical Officer
of the Raj Marwar Hospital.

Sir,—

Kindly I will pen here a few lines informing you that : On the Times of India, dated first December 1926 I will came to know that there are five vacancies of " Compounders " fallen in your office department, under your kind control. And I do my poor petition for the same, which I understand that you will never fail, to give me, to secure one of them.

I am a Compounder of six years experience and I had served in many private dispensaries, and all so in the-Bomonjee Petitt Parsee General Hospital, for the last year 1925th ; I may think that I am able to work in your Medical Department as the same, by giving you every satisfaction.

Honestly I will apply to you sir, understanding that my application will be preferred and not to be thrown away.

If I be fortunate to obtain the same situation I shall try to my best by giving you every satisfaction performing diligently and conscientiously my duties.

Thanking you in anticipation.

I will remain Sir, Your's most obedient
Servant

(Sd.)

N.B.

Excusing me for the trouble, please kindly let me know the salary which you are going to give with food or without food.

The Pavy Gymnasium.

DEAR SIR,—Will you please publish the following notice : " The Pavy Gymnasium will be closed to all members from Friday, February 4th, 1927, at 7 p.m., until Monday, February 7th, 1927, at 12 noon. This is to facilitate the transference of the catering arrangements from the A.B. Company to the Hospital Company."

I am, yours faithfully,
CHAS. H. JOHNSON,
Captain of the Pavy Gymnasium.

Pavy Gymnasium,
Guy's Hospital, S.E. 1.
January, 24th, 1927.

An O.P. Letter.

DEAR SIR,—The following letter was received at Out-Patients last week. I thought you might like to publish it.

Yours faithfully,
SENIOR DRESSER.

Dear Docter

just a few lines to ask you can you examine my Son properly as I want to know if you will give him his Discharge as the chap as had 2 jobs and the Labour people stop him from working the chap is good for work therefore why not let him do it he plays football and all kinds of sport and dont complain therefore I dont see why they should stop him from work as it is a great struggle for me to keep a big chap like as I am very ill in Bed myself and cant get out therefore I hope you will give him his discharge to take to the Labour people for work from yours Sincerely

Mrs. ————
the chaps Mother

Ward Concerts.

DEAR MR. EDITOR,—You will doubtless be publishing in the present number details of Ward Concerts, and it seems an appropriate moment to discuss the question in general. Ward Concerts have been tending to become more and more elaborate, with a growing competition between producers to obtain a greater number of noted artistes. As a result audiences have multiplied until they are composed of a dozen patients and a couple of hundred others, many of whom have but a slight connection with the Hospital, and many of whom could afford to pay to see the performance. The upheaval of a ward consequent upon an elaborate concert must of necessity be troublesome to patients who are really ill, and the provision of refreshments is an unnecessary and wasteful tax on the nurses and others attached to the ward.

The points I would make are that our primary object should be to entertain the patients, and that it is unfair to ask artistes to perform without fee to an audience who can afford to pay for their entertainment and are not asked to do so. I think that something approaching a solution was found this year in some wards, where, without any advertising and with no paraphernalia, a few generous artistes, many of them attached to the Hospital, entertained the patients and a limited number of their friends.

I am, sir,
Yours truly,
NOT EVEN A MEAN PERFORMER.

[The above letter, on which we commented in " Passim," was omitted by a regrettable oversight from the last number.—ED.]

Reviews.

The Natural Process of Healing in Pulmonary Tuberculosis. By MARC JAQUEROD, M.D. Translated by J. DENNY SINCLAIR M.B., B.Ch. Published by Messrs. Bailliere, Tindall & Cox. *Price 6s. net.*

THIS small book should be of value to students because of the excellent reproductions of X-Ray photographs of the various types and stages of tuberculous infections of the lungs. Accompanying each of the photographs is a diagram with conventional signs indicating the clinical findings—a very helpful addition.

As the translator remarks, the text is not an absolutely faithful rendering of the original owing to difficulties of finding exact words to correspond with those of the author. And it is possibly owing to this that such statements that phthisis is "a localised disease" occur—the exact meaning of this statement is not quite clear, but probably intends to convey the idea that the condition is a toxæmia with a localised focus and not a septicæmia. One of the main themes of the text, which may be easily read in half-an-hour, is that in addition to the classical modes of evolution of pulmonary tuberculous foci, namely: (1) Caseation; (2) fibrous transformation; and (3) calcification; there is a fourth, Resolution, if the disease is taken early enough. The series of X-Ray photographs are arranged in proof of this thesis, and one is bound to admit are convincing as far as they go, though one would like the final proof of autopsy. Most are agreed that tuberculosis of the lungs may "clear up" with appropriate treatment, but it is difficult to believe that this is comparable to the resolution of lobar pneumonia.

The Carrier Problem. By K. C. PAUL, M.B., B.S. Pp. 93. First Edition. Oxford University Press (Humphrey Milford). *Price 5s.*

IN the course of his hospital training the student does not usually become aware of the immense importance of carriers in the propagation of disease. If the world were suddenly emptied of all such carriers it would, in the present state of our knowledge, seem probable that the causal organisms of many maladies would forthwith die out and the diseases disappear. Such diseases are enteric fever, diphtheria, meningococcal meningitis, pneumococcal pneumonia, anterior polyomyelitis, dysentery and probably influenza. From the point of view of preventive medicine, therefore, few problems are of greater importance than that presented by the carrier.

In this book Dr. Paul has performed a valuable service in collecting into a small compass and reducing to a very readable summary the numerous original papers that bear upon this problem.

Carriers of disease usually harbour organisms in one of three localities; the nasopharynx, throat and upper respiratory passages are the home of the Klebs-Loeffler bacillus, meningococcus, pneumococcus, streptococcus scarlatinæ and the virus of anterior polyomyelitis; the alimentary tract or the gall bladder is the dwelling place of the bacilli of the enteric group, the cholera vibrio, the dysentery bacilli and the entamœba histolytica; the urinary passages may accommodate the organisms of the enteric group, the cholera vibrio and the micrococcus militensis.

A factor of much relevance to the carrier problem is the degree of natural immunity possessed by a given community to a given disease. When a disease breaks out sporadically—a case here and a case there without any assignable common origin—as do cases of pneumonia, meningococcal meningitis, encephalitis lethargica or anterior polyomyelitis (sufferers from which diseases are admitted with impunity into the general wards of a hospital), it can be assumed that the general resistance to the disease is high. The organism may be ubiquitous and carriers may be common. Thus, Hermann has estimated that in America only 2 per cent. of people are susceptible to the virus of anterior polyomyelitis. The detection of carriers of such diseases will obviously be a formidable task.

In the cases of a disease, the general resistance to which is low, when exposure to the causal organism is *in most instances* followed by the development of disease, as in typhoid fever, the detection of the carrier is much facilitated. Another very rough index of the degree of natural immunity to a disease is the number of contact carriers as compared with convalescent carriers. A contact carrier is a person who has been in close association with a sufferer from a given disease, who has acquired the organism thereof and harbours it in his body without evincing any symptom of the disease. The contact carrier is therefore a person with a high, though not a complete, resistance to the disease in that the organism can live in his body, but cannot injure it.

In typhoid fever, the general resistance to which is low, 90 per cent. of carriers are convalescent carriers. Of the dysentery bacilli, contact carriers also appear to be rare. That the resistance against

the amœba hystolytica is higher than this is shown by the fact that of 18 persons fed with this protozoon, only 4 developed active disease. The remaining 14 became carriers.

It is regrettable that the treatment of carriers is in the great majority of cases so disappointing. The inadequacy, in fact, of such treatment is considered by Dr. Paul to constitute a sufficient reason for refraining from attempting anything like a general education of the public in this matter.

The treatment, such as it is, is mentioned at the end of each of the ten chapters. It seems to us a pity that the author did not include in each chapter an account of the bacteriological and serological methods of confirming that a suspected carrier actually *does* harbour the suspected organism or virus. The technique has been mentioned in some diseases, but not in all. This would be a definite improvement for the second edition, into which the book fully deserves to go.

Guy's Hospital Reports. No. 4, Vol. 76. Published by Wakley & Sons, Ltd. *Price* 12*s.* 6*d.*

THE high standard of these Reports is well maintained in this number and cannot fail to be of great interest, particularly to Guy's men.

The article on the comparison of two brothers, apparently monozygotic twins, is of unusual interest to those of us who have long since held the view that no two individuals, whatever their origin, ever react in an identical manner to any given stimulus. Many of us begin medicine in the glorious faith that for every ill there is a cure, and that the same dose will equally affect different individuals suffering from an identical complaint. Our first shock is the attitude to castor oil of the Borough child as compared with that of his West End contemporary. Dr. Crowther has, however, shown that the term "identical," as applied to monozygotic twins, is no exaggeration in view of the consistency of his findings over a very divergent field. It would be interesting to complete the study of these brothers in a more abstract field, for should their philosophical and religious views prove also to be identical, it seems we have unearthed a paradox involving free will and environment and of interest to the padre.

In the article by Campbell on the effect of exercise in respiratory exchange he concludes, *inter alia*: "Different types of cardiac disease produced different changes in the respiration. Rapid, shallow breathing was specially characteristic of mitral stenosis. . . . On the other hand, the breathing was often as deep as normal when aortic regurgitation was the main lesion, and the rate only increased as the breathlessness became more extreme."

It would appear to be of some academic interest to discuss the connection between the O_2 and CO_2 content of the blood in these two types of valvular disease and the contention of certain physiologists that CO_2 in excess increases only the depth of respiration, and anoxæmia only the rate. The actual velocity of the blood stream through the capillaries of the lung seems to be of paramount importance in a question of this kind, and one wonders whether any difference in pulmonary circulation time has been observed in these types of cases by the intravenous radioactive substance screening test recently developed in America.

Osman's work, on the treatment of œdema with nephritis by means of alkalies, though by no means new, is a distinct step forward, particularly in that he suggests what may after further trial prove to be a useful prophylactic measure against scarlatinal nephritis, which forms a very large group of all the nephritides. Any prophylactic measure must therefore be welcomed. At the moment it is a little difficult to understand how alkalies, *per se*, prevent toxins presumably present in the blood stream from affecting the kidney parenchyma, unless we assume that they are only effective in acid medium, like certain drugs. The very large doses employed to treatment of the œdematous cases seem startling at first glance, but they are large probably only in the figures.

Dr. Hurst describes a case of splenomegaly and anæmia with a spasm of the upper sphincter of the œsophagus. He differs from the views of Vinson as to the basis of the dysphagia, and accounts for the symptoms in his own case by the streptococcal infection of the mouth and pharynx. The spasm seems to me to belong to the group of similar intractable spasms seen in the Neurological Department and usually associated with the muscles of the head and neck. Whether or not they have a demonstrable organic basis seems to remain a matter of individual bias.

Eckhoff describes a case of Meckel's diverticulum which exhibited one example of "the many and serious complications to which it may be liable if left in the abdomen." The pathology of the cystic change found seems obscure.

Trethowan's article on Massage and Remedial Exercises covers a good deal more ground than the title would indicate. The fundamental principles involved in the prescription and application of massage and exercises are illustrated with the aid of a brief description of the underlying pathology of the particular lesion under discussion. One cannot but feel that there is a definite scope for a fuller account of the subject from this point of view, particularly as current text books on surgical methods frequently tend to avoid, or at any rate neglect, this highly specialised part of what may be termed surgical therapeutics.

A case of death following craniotomy is described by Brooke and Cook in a woman who had had previously six spontaneous deliveries. They found P.M. "a definite deformity of the pelvis due to the whole upper part of the sacrum being pushed forwards in relation to the iliac bones." This they ascribe as conceivably due to too early rising after previous confinements, and suggest that for the working class mother the customary ten days lying-in period is really not sufficient for efficient recovery of the bones and ligaments of the pelvis to stand the strain of ordinary life.

Four very interesting cases from the Ear, Nose and Throat Department are published, including one of the spontaneous expulsion by coughing of what was probably a true pneumolith. It is a pity that the example of Mr. Mollison and his dressers is not more often followed by other departments, for there must be a large mass of interesting and important material which remains buried in special departments. Routine publication of rare and interesting cases should be the rule.

Carter-Braine and Grant Massie discuss the result of treatment of 722 cases of carcinoma mammæ. They conclude, *inter alia*, that (1) in late cases the less extensive the operation the longer the life of the patient, (2) in late cases extensive operative interference leads to rapid dissemination and frequently does not confer a greater length of life than is to be expected when operation is withheld. This is rather what one would expect on the grounds that a patient already debilitated by the inroads of disease loses as a result of post operative shock what little of resistance to the invading tumour cells she may have had.

Nursing News.

A Gala Night.

ON Friday, January 21st, there were gay and brilliant scenes in the Nurses' Home, where Matron entertained a large company, including the Sisters, to a most enjoyable dance. Matron received her guests in the hall and extended a warm welcome to all. The hall and rooms were most tastefully decorated and made a good background for the dainty frocks worn by the ladies. Dancing took place in the large sitting room to the excellent music provided by Mr. Greenway and his band. Before the company broke up, Mr. R. E. Smith thanked Matron on behalf of all the guests for the very enjoyable evening.

We should liked to have given her three hearty cheers, but, remembering the patients in the wards, we refrained from doing so. We only hope that Matron realised how much we appreciated her kind hospitality.

Miss K. A. Burton, who resigned her post as Sister Esther in May, 1925, owing to ill-health, has now returned to the Hospital as Sister-in-Charge of the Children's Ward in place of Miss Matthews, who has been appointed Miss Griffith's successor in the Surgery.

Sport.

Rugby.

Guy's v. R.A.F.

IT was a strong side the Air Force brought to Honor Oak Park on Wednesday, January 5th. The rain of the morning had made the ground surface very slippery, so that foothold was a lottery and the handling of the ball a matter of much difficulty. Notwithstanding this, V. G. Boyle at full back played a splendid game—fearless to a degree, and skilful as well. He had many fierce rushes to stop, and he did it thoroughly.

Most of the play was confined to the forwards, and scrums were constant. Much of this hard scrummaging was due to men on both sides going down to the ball and stopping the footwork, in which both packs constantly engaged. We were penalised many times, the reason often difficult to see, though some infringements were proclaimed as "lying on the ball." How to get off the ball with these hefty airmen sitting on one is a difficult feat and, with the ground doing its best to keep one down, almost impossible.

The handling when the ball was got away was good, and Guy's pressed for a considerable time, but a good breakaway by Harvey, on the left of the Air Force line, saw that player give a perfect pass to Bryson, who scored behind the posts. Chick missed the conversion. Directly afterwards Van Schalkwijk punted for touch, but Harvey caught the ball and was off again. Another pass to Bryson, but this time Wilkinson had got back and managed to account for Bryson by a vigorous tackle.

After half time free kicks were frequent. The hard play of Chick, Maxwell and Beamish was well countered by our men. Simpson-Smith, Myburgh and Malone were always prominent, while in the loose none played harder than Cameron and J. Durr, who was ever a thorn to the opposition. Swerving, by Clarke and Ive, could not be done, but perfect passing from right to left ended in Wilkinson crossing wide out and J. Durr kicking a splendid goal.

The team tackled exceedingly well, and no one lacked pluck in defence. We won by the margin of J. Durr's kick, but a draw would have been a fitting conclusion to a very hard game.

Guy's Team—V. G. Boyle; O. Ive, F. T. Wilkinson, F. H. B. Spence, G. C. Clarke; W. D. G. Jones, J. G. Van Schalkwijk; G. G. Cameron, W. H. Myburgh, J. Durr, A. Simpson-Smith, J. H. Richmond, L. Brown, J. H. Cullinan, C. D. Malone.

One or two forwards have a tendency to get offside—a dangerous policy. The offside rule is so differently enforced by each individual referee. The pack did well against greatly superior weight. Jones' task was a very difficult one, as conditions were dead against scrum-half play, besides having J. C. Russel, who often plays for Leicester, against him. One cannot say much about the backs in attack. Their defence was much better than against the Taylors'

Guy's v. Old Leysians.

OF all good sportsmen that oppose us annually none surely are superior to these Old Boys of Leys School. Few reside in London, so that they do not run a 2nd XV, and their membership is extremely limited. Yet despite injuries and other calls they never fail to get a team and never grumble. They play their hardest with those available without a care for anything but the game, and giving to it of their best. Many a surprise have they given us, and in recent years it is generally T. E. Morel, G. H. Philp and A. G. B. Thompson who have been chiefly instrumental in beating us. They always play well, but like men inspired when Guy's are against them. On Saturday, at Honor Oak Park, T. E. Morel found touch with fine judgment. Yet we had the best of it until Thompson broke through and was almost clear. The heavy ground, however, slowed him, and Wilkinson completed his downfall. Then came a relief dribble by Durr. A scrummage in midfield and a smart cut through led up to a try by F. H. B. Spence, Durr's kick hitting the post. Some good passing by the backs and Spence opened the way for Wilkinson to add a try, Durr converting.

The second half had just commenced when Boyle hit the upright with a drop at goal, and a minute or two had been played when Van Schalkwijk successfully crossed the line, Durr again converting. After this the game became much harder. Garland did as well as ever, but his chances were less numerous, and the Old Boys had more of the game. Fifteen minutes to go and Guy's 13 points ahead. These fifteen minutes were crowded ones. A scrum on our line and the ball came to Morel, a calm drop at goal and the Old Leysians had got 4 points. From midfield A. G. Thompson kicked to the corner, Philp came up at full speed and was over before being tackled. Seven points was now the Old Boys' score. Our forwards returned to the attack, the game settled in the Old Boys' 25, and Lewis followed up good work by crossing, but in trying to get round he failed to touch down properly. Again we attacked; a pass was missed and a kick to touch failed to find it. Philp got his foot to the ball and with great speed dribbled downfield for an unconverted try.

It was a great finish to a good game.

Result—Guy's, 2 goals 1 try (13 points); Old Leysians, 1 dropped goal 2 tries (10 points).

Guy's Team—V. G. Boyle; O. Ive, F. H. B. Spence, F. T. Wilkinson, A. D. Lewis; T. O. Garland, J. G. Van Schalkwijk; G. G. Cameron, W. H. Myburgh, J. Durr, J. R. F. Popplewell, A. Simpson-Smith, J. H. Richmond, E. R. Clarke, J. H. Cullinan.

Myburgh was at his best in the scrum and in defence. Richmond packs too high; he loses thereby half his weight. Popplewell was not so energetic as usual, and Cullinan must keep onside. It is necessary to be on one's toes—but behind the ball. It is impossible to criticise the play of the half backs. Determination is wanted on the wings, and much more thrust in the centre. Boyle was very good indeed.

Guy's v. Old Merchant Taylors.

ON a firm surface, with practically no breeze, we played this famous Old Boys team at Teddington on New Years' Day. A bad day for Hospital teams, because on New Years' Eve there is much work as well as play for Hospital men who remain in Town. This may account for the lack of life among the majority of the men that represented Guy's on this occasion.

The game was exceedingly open, and at first we got the ball so regularly that we seemed certain to score. Once Ive was well away, but he looked round for help—a fatal thing to do. Twice Lewis made fine attempts to cut through, and F. H. B. Spence did good work, but there was not quite the

amount of speed present to get that one more ounce that is almost a guarantee of success. F. F. Spragg, the Oxford full back, was difficult to get past. Clarke played well; he was good also in defence. Van Schalkwijk kicked with great effect and also got his line moving, but the absence of pace in the centre was the stumbling block. The game went quickly from end to end, the home side being more together and both quicker on the ball and off the mark. A lofty kick over the goal line was not followed at full speed by P. D. B. Spence, who apparently did not realise Newell's speed. The right wing three-quarter dashed up and touched down for a try, which came as a surprise to all. Just before half time Myburgh and Spence were damaged, though both played on. Myburgh was very plucky to resume so quickly. Spence also stuck gamely to his task, though in much pain.

The Taylor's second try was a good "blind-side" movement by L. Bywater. Spence tackled him, but Newell had received, and no one now blocked his way. The try was not converted.

The pace now became faster still, and on our right some pretty inter-passing took place between Garland, Lewis, Spence and Ive. Three times Ive tried to pass Spragg. But at last success came through Lewis gaining a determined try in the corner. Clarke was doing good work on the left, but the passing was not his way. He was helping Spence continually, but a kick was charged down and three Taylor forwards dribbled over for Brown to score. J. W. Schabort, who was ubiquitous, nearly cut through on his own—Schabort would make a great three-quarter. Then came our last try. Good passing from left to right—Garland, Lewis, Cameron, and Van Schalkwijk—the last to receive scoring. Excellent were Schabort's attempts at conversion, going wide only by inches.

Result—Guy's, 2 tries (6 points); Old Merchant Taylors, 3 tries (9 points).

Guy's Team—P. D. B. Spence; O. Ive, A. D. J. Lewis, F. H. B. Spence, G. J. Clarke; T. O. Garland, J. G. Van Schalkwijk; G. G. Cameron, W. H. Myburgh, J. W. Schabort, J. R. F. Popplewell, J. H. Richmond, L. Brown, A. Simpson-Smith, C. D. Malone.

The second half of our season has now commenced and the team that is likely to represent the Hospital in the cup ties will soon take shape.

P. D. B. Spence kicked and fielded well till injured. Lewis tackled much too high and passed wildly. F. H. B. Spence wants more speed, but he marked his man well. Clarke played soundly. Ive needs hard practice and stronger defence. Both wingmen must go hard for the line and not slow up for an inside pass or cross kick on scenting opposition. Both T. O. Garland and J. V. Schalkwijk were in form.

It was not the forwards' fault we did not win, though they were not so good in the loose as usual. In the tight they worked hard. We need yet more hard following up, more devil when the ball is on the move, closer and harder rushes.

Golf.

Staff Cup.

OWING to many unforeseen circumstances the time allotted for the Competition for the Staff Cup for 1926 had to be extended, and consequently the Competition has only recently been concluded.

In the final round, I. E. Buxton met J. H. Anderson over 36 holes. This match proved a great struggle, and at the end of 18 holes the game was all square. A keen fight continued, and Buxton ultimately proved the winner by 1 hole. Final Round—I. E. Buxton beat J. H. Anderson 1 up.

Monthly Competition.

A Bogey Competition was held on Wednesday, January 5th, on the West Kent course.

Unfortunately it rained all the morning, and this probably deterred many from coming down in spite of the fact that the rain ceased about 1.30 p.m., and those of us who did play had a very enjoyable afternoon in the fine.

In marked contrast to the first meeting of the season, when a record number of 15 members came down, only 7 members braved the elements.

The winner, H. J. Croot, played sound golf, but he should be warned that in wet weather it is unwise to prostrate oneself for long periods studying the line of one's putts.

Buxton and Cotton also played well, the putting of the latter being especially good.

G. T. Hankey, who was a keen favourite, returned with a sad story. His pocket had perforated and his card fallen out.

A committee of experts will inquire into the facts of the case, and suitable punishment meted out for infringement of the rules of the Royal and Ancient game.

A deputation will also wait upon the take-in firm with a view to obtaining immediate relief for the offending pocket.

The next Competition held by the Society will be a Medal Round on Wednesday, February 2nd,

when it is hoped that more members will be able to come down, and that members of the Staff will be able to join us.

Monthly Bogey—H. J. Croot, 3 up; I. E. Buxton, 1 down; W. J. Cotton, 2 down; P. T. L. Day, 5 down; E. C. Duffett, 7 down.

Handicaps—P. T. L. Day, 24; H. J. Croot, 24 to 18.

E. C. DUFFETT, *Hon. Sec.*

Fencing.

THE Inter-Hospital Fencing Match was renewed this season after a lapse of about twenty years. As the old Cup—if there had ever been one—was lost, Mr. P. W. Doyne, the first President of the reorganised club, generously gave a new trophy. Guy's have won this with a narrow margin of 2 points over St. Mary's.

It was anticipated that six Hospitals would enter for the three weapon contest, so entries were limited for this season to two from each Hospital in each weapon. Two pools of six each were drawn for, and it was so arranged that entries from the same Hospital should be in different pools. This method proved satisfactory, and was designed to guard against one star fencer carrying off the Cup for his Hospital.

Seven Hospitals sent in entries for Foil, Middlesex and St. Mary's sending one each. In the first pool E. L. Monkhouse played at the top of his form, and obtained equal first place with C. P. Collins, University College, each with one defeat.

In the second pool S. A. Scorer showed his best form—form which he has not approached this season—but was outplayed by G. L. Stroud, St. Mary's, who was undefeated; J. C. Gordon, St. Bart.'s; and R. Dowdeswell, St. Thomas's.

In the Epée C. H. Johnson was at his best, losing one fight only, a coupé double, to G. Raphael, St. Bart.'s, and sharing first place with C. G. Brée, University College.

In the second pool P. A. Gorer struck one of his very unlucky days, winning only one fight. Certainly he had the harder pool, including Stroud, Collins and Gordon, all tying for first place with one defeat each.

In the Sabre S. A. Scorer showed his best style, and shared first place with Stroud. J. L. Franklin, St. George's, was third. C. H. Johnson, in the second pool, obtained first place with no defeats; S. F. Smith, St. Thomas's, second with one defeat; and E. F. Hunt, St. George's, third after a triple barrage with Raphael and P. A. Cooper, University College.

The finals of all three weapons were fought off at the London Fencing Club in one afternoon.

E. L. Monkhouse made a good start in each of his fights, but he allowed his eagerness to carry him beyond the bounds of discretion, and, unfortunately, won only one bout. It seemed to be impatience rather than lack of skill that lost him at least two other bouts. Collins and Stroud tied for first place, Stroud beating the former in the barrage by 4 hits to 2. Monkhouse obtained fifth place and gained 8 points for the Hospital.

C. H. Johnson, in Epée, again showed good form, and obtained third place, after winning a triple barrage against Brée and Franklin. He also gained 8 points towards the Cup.

In Sabre, Johnson and Scorer had to fight first. This resulted in a very narrow win for the former by 4 hits to 3. They obtained second and third places respectively, thus gaining 17 points for the Hospital.

Tribute must be paid to G. L. Stroud, St. Mary's, who fought 16 fights in one afternoon, losing only two. It was only the system of scoring that prevented St. Mary's from winning the Cup with one man.

Hospital	*Result* *Team*	*Pts.*
1 *Guy's*—	C. H. Johnson, S. A. Scorer, E. L. Monkhouse, P. A. Gorer - - -	33
2 *St. Mary's*—	G. L. Stroud*† - - - - -	31
3 *University College*—	C. P. Collins,‡ P. A. Cooper, C. G. Brée, J. D. Kershaw - - - - -	28
4 *St. George's*—	J. L. Franklin, E. F. Hunt - -	24
5 *St. Thomas's*—	R. Dowdeswell, S. F. Smith - -	17
6 *St. Bart.'s*—	G. Raphael, J. C. Gordon, J. Milsome	14
7 *Middlesex*—	A. McK. Fleming - - - -	0

* Winner in Foil ‡ Winner in Epee
† Winner in Sabre

Rifle Association.

ARRANGEMENTS have been made for members of the above Association to shoot at the Cripplegate Institute Range on Thursday evenings during the winter season between the hours of 5.30 and 9.30 p.m.

Conditions of Shooting

Entrance Fee - 1*s.* per member
Subscription - 5*s.* ,,

All those who put in 50% of the possible attendances will qualify to have part of their subscrip-

tion refunded at the end of the season. The amount refunded will depend upon the number qualifying for the refund.

Ammunition supplied at 4*d.* for 10 rounds. Rifles supplied free.

As many members as possible are asked to turn up at these practices so that the Hospital may be prepared for Bisley and the Competitions for the Armitage Trophy.

Half Blues

Owing to the fact that the Inter-Hospital Shoots were not held—due to the General Strike and other causes—no recommendations will be made to the Blues Committee this year in respect of last season.

Sailing Club.

General Meeting for Election of Officers.

THE General Meeting of the Club was held on January 20th, the Commodore, Dr. French, being in the chair. Owing doubtless to the fog upsetting their navigation, many members failed to make the intricate passage to the Committee Room.

The Commodore, Dr. French, and the Vice-Commodore, Professor Stokes, Dr. Symonds, Mr. McNair, Mr. Doubleday, Mr. Ogilvie were unanimously re-elected.

The Secretary and two old members of the Committee—Messrs. Tupling and Girling—were re-elected, and the four vacancies filled by the election of Messrs. Miller, Huddy, J. K. Marshall and Roscoe-Clarke.

A motion was then put forward by E. H. Roche to the effect that a captain should be elected in addition to the Secretary, for the purpose of coaching novices and helping with pre-regatta work.

The Chairman pointed out that due notice of such a motion must be given to members, and that another meeting should be called at a future date.

The meeting then closed with the proposal of a vote of thanks to the Commodore for journeying down and taking the chair.

S. NESBITT WOOD, *Hon. Sec.*

United Hospitals Hare & Hounds.

U. H. H. & H. v. Imperial College of Science.

THIS match was held at North Wembley on January 19th over a course of 4½ miles, and resulted in a win for the Hospitals by 23 points to 32.

The course was not at all a good one, as it led either along long stretches of road or else through sewers. The conditions, too, were very wet, so that the course was in a very bad state.

For the Hospitals, May, Walter and Sandiford, who is a new comer, all ran well, while Spencer, of the Imperial College, led all the way round.

Counting 5 a side, the results were:

United Hospitals—2, 3, 4, 6, 8—23 points.

Imperial College of Science—1, 5, 7, 9, 10—32 points.

The final order was:

		Mins.	Secs.
1.	— Spencer (I.C.)	27	37
2.	G. W. May (U.H.), (London)	28	0
3.	— Sandiford (U.H.), (St. Thomas's)	28	32
4.	W. J. Walter (U.H.), (Bart.'s)	28	40
5.	— Anderson (I.C.)	28	41
6.	R. R. Race (U.H.), (Bart.'s)	28	43
7.	— Sinfield (I.C.)	29	8
8.	P. A. Forsyth (U.H.), (St. Thomas's)	29	28
9.	— Ellis (I.C.)	29	35
—	M. P. Way (U.H.), (Guy's)	30	10
10.	N. D. Angier (I.C.)	30	25
	— Russell (I.C.)	30	33
	R. G. West (U.H.), (Bart.'s)	31	0
	H. G. McComas (U.H.), (Guy's)	32	0
	— Carlile (I.C.)	32	45
	— Ingold (I.C.)	33	15

M. P. WAY, *Hon. Sec.*

Hockey.

ON Wednesday, January 12th, the 1st XI played the Royal Naval College at Greenwich.

We were not at full strength, and missed the services of Willett, Curtis and Catchpole.

For the first half, play was very even, the backs and halves playing a magnificent game for the Hospital.

At half time the score was 2–1 in favour of the College, Campbell having scored for Guy's.

Our opponents' defence was very sound, and the forwards could make little headway against it. But it was a most enjoyable game, and if the forwards had been able to make more use of the many excellent passes they received the score might have been reversed. As it was, we lost 5–2.

The tackling of the backs was very good, but for clearing from that position a hit is usually more useful than a push.

The halves played very well. Of the forwards, the outsides might do better to sometimes centre a little earlier. The wing position is not best suited for goal scoring.

The insides should never think twice about shooting directly they get in the circle, and they must go back in defence.

Team—R. E. Smith; F. E. Camps, F. R. Hayward; R. A. Sykes, C. N. Howitt, G. N. Carrell; K. B. Wood, G. C. Campbell, C. A. W. Archer, R. Catchpole, H. O. Lyne.

Hospital Information, etc.

Pass List.

University of London.

M.S.

December, 1926.

BRANCH I—*Surgery*

G. F. Gibberd, W. R. Spurrell.

FIRST EXAMINATION.

December, 1926.

H. Bloom, N. L. B. V. Eckhoff, D. Erskine, D. P. King, G. F. Lashmore, M. L. Mistri, J. F. Morris, I. Moshinsky, C. H. Rogerson, D. Stone.

Papers by Guy's Men.

R. P. Rowlands, M.S., F.R.C.S. Carcinoma of the Colon, *B.M.J.*, 1927, i., 95.

Philip Turner, M.S. Pseudo-Hermaphroditism, Proc. Roy. Soc. Med., 1927, xx., 191, Clin. Sect. 11.

C. Worster-Drought, M.D. Charcot's Anthropathy of Wrists, *Ibid.*, 192; *Ibid.*, 12.

E. G. Slesinger, O.B.E., M.S. Carcinoma of Thyroid in a Boy aged 12, *Ibid.*, 192; *Ibid.*, 12.

W. E. Tanner, M.S. Deformity of Right Shoulder, with Associated Deformities of Ribs and Cervical Spine, *Ibid.*, 194; *Ibid.*, 14.

F. D. Saner, F.R.C.S. Abdominal Tumour, *Ibid.*, 194; *Ibid.*, 14.

N. L. Eckhoff, F.R.C.S. Diaphyseal Aclasia with Ulnar Nerve Weakness, *Ibid.*, 195; *Ibid.*, 15.

Alan H. Todd, M.S. Recurring Outward Subluxation of Right Carpometacarpal Joint, *Ibid.*, 239, Sect. Orthop., 9.

F. J. Steward, F.R.C.S., and T. B. Layton, F.R.C.S., and Others. Discussion on the Treatment of Cancer of the Œsophagus, *Ibid.*, Sec. Surg., 1-9.

C. P. Symonds, M.D., and M. E. Shaw, M.D. Familial Claw Foot with Absent Tendon Jerks: A "Forme Truste" of the Charcot-Marie-Tooth Disease, *Brain*, xlix., 1926, 387.

G. F. Gibberd, M.B. Obstructed Labour Due to Congenital Twins, *Clin. Journ.*, 1927, lvi., 29.

J. M. H. Campbell, M.D. Early Accounts of Acholuric Jaundice and the Subsequent History of Wilson's Patients, *Quart. Journ. Med.*, 1926, xix., 323.

—— and E. C. Warner, M.R.C.S., L.R.C.P. Heredity in Acholuric Jaundice, *Ibid.*, 333.

R. Hale-White, M.R.C.P., and W. W. Payne, M.B., B.S. The Dextrose Tolerance Curve in Health, *Ibid.*, 393.

J. M. H. Campbell, M.D., and E. P. Poulton, F.R.C.P. The Effect of Exercise on the Respiratory Exchange in Chronic Bronchitis, Paper I., *Ibid.*, xx., 27.

—— ——. The Effect of Exercise on the Respiratory Exchange in Chronic Bronchitis, Paper II., *Ibid.*, 49.

Change of Address.

W. C. Hancock, 116, Brockley Rise, S.E.23.

John James, 6, Bentinck Street, W. 'Phone: Langham 3933.

K. F. McAlpin, 32, Portland Place, W.1. 'Phone: Langham 2987.

List of sums found in the Hospital Collecting Boxes during the year 1926.

	£	s.	d.
Almoner's Office	8	4	2
Appeal Office	3	14	0
Colonnade	46	7	6
Conservation Room	15	19	5
Counting House	3	12	9
Deep Therapy	10	0	5
,, (Skylight Fund)	14	1	0
Front Gate	14	6	0
Light and Electric Dept.	60	3	4
Sunlight Department	11	11	8
Massage Department	179	18	1
Out-Patients	74	3	5
Out-Patients Annexe	11	10	5
Surgery	63	2	10
Visiting Day Collections	882	15	8
X-Ray Out-Patients	6	2	5
Wards—			
Addison	2	13	3
Astley Cooper	1	4	7
Bright	0	3	7
Children's	3	12	1
Christopher	0	16	1
Clinical	0	3	4
Cornelius	3	18	5
Dorcas	2	2	9
Evelyn	1	7	5
Eye	0	12	0
Job	0	15	5
Lazarus	2	7	1
Luke	0	18	10
Lydia	3	18	8
Martha	2	2	9
Mary	2	7	4
Naaman	2	2	9
Patience and Samaritan	0	5	9
Queen and Victoria	1	5	11
Stephen	0	19	3
	£1,439	10	4

Notice.

Final Fellowship Course.

THE next Final Fellowship Course will commence on Wednesday, March 2nd. As this class is limited in number, Guy's men wishing to attend should communicate with the Dean at once, as nearly all vacancies are already filled. The fee for the course is £26 5*s.*, or £17 10*s.* to Guy's men.

EDS. { P. F. S. C. / G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *February 12th, 1927.* *Number 1006*

PASSIM

SINCE the days of Hippocrates, physicians have been up in arms against what, until recent years, has been a "dire and dread disease." Pulmonary tuberculosis, phthisis, consumption—call it what you may—has worried the minds of doctors and the lay public alike, and we, in our Editorial sanctum, have often asked ourselves the question: "Have *we* a tuberculous focus at *our* apex?" and, dreading lest this be so, we have hurried to our friends beseeching them to "sound us" in order to discover whether or not there is within us those "crackling rales"—the red flag of the tubercle bacillus. So far, the Editorial lungs have escaped so ruthless a disease, but we, like the lay public, have our fears, remembering of old the phrase of our venerable master: "You see, doctor, tuberculous lesions will be found at *every* apex at autopsy."

It is thus with feelings akin to anxiety and dread that we have been reading recently of the controversy over the utility or otherwise of the Spahlinger method of treatment. It is well nigh 13 years since some cases were treated in St. George's Hospital by Mr. Spahlinger—the cases which have caused such a flood of literary abuse to fill our leading medical journals. The evidence put forward in favour of or against the treatment of these cases seems in our opinion to be absolutely inconclusive, as, indeed, every statement must be about a treatment which is almost entitled to be given the *nom de plume* of a secret remedy; a title distasteful alike to us and to the profession as a whole.

It has been alleged that the medical profession is so prejudiced against Mr. Spahlinger, because he is not one of their members, that they are unable to give fair consideration to his claims. With regard to this we would point out that this same profession look upon a French chemist, Pasteur, as the originator of the greatest advances in modern medicine.

As far as we can tell, excepting the evidence of a very few, which to our mind is unconvincing, medical evidence in favour of the treatment is lacking. At the most, the treatment, after a dozen years or more, is still in its experimental stage and, on account of the limited supplies, practically at a standstill.

We feel that the case is, like many problems in medicine, one of "not proven." To remedy this a more extensive investigation into the means of obtaining. and the methods of administration, of the treatment must be carried out. To do this money is needed, and recently the lay press has been "boosting" the treatment as a "cure" in order to obtain this money from the sympathetic community.

Mr. Spahlinger would have shown greater respect to the spirit of science and scientific research if he had frankly published the experimental data on which his treatment is based and so given others an opportunity of testing their soundness; and unless he gives his compliance to the appointment of a committee composed of experts who would make it their duty to carry out a complete investigation of the treatment—and except a favourable report be received thereon—in our opinion no Government or public body, or the public themselves, would be justified in advancing money for the support of his treatment.

Since Mr. Spahlinger first started his treatment several hundreds of thousands of people have died in this country alone of tuberculosis, and the essential details of his method still remain undisclosed—remain a *secret remedy.*

Together with other leading medical journals, we appeal to Mr. Spahlinger to allow some investigations to be made into his remedies by independent observers, by which means his position with the medical world could be made more harmonious, his financial difficulties be relieved, and

the community at large be blessed with a remedy for a disease which gives rise to such untold misery.

THE Residents' play was performed in the Physiology Theatre on the nights of February 8th, 9th, 10th and 11th. We feel sure that we express the sentiments of our readers when we congratulate the producer, Mr. H. J. Selby, on a play which maintained the very high standard reached in the last few years. We hope in our next issue to publish a criticism of the play, written by our Dramatic Correspondent.

ARRANGEMENTS have been made to hold the next Guy's Hospital Biennial Dinner on Friday, November 4th, 1927, at the Edward VII Rooms, Hotel Victoria, Northumberland Avenue, and we have great pleasure in announcing that the Chairman on that occasion will be Dr. Fawcett.

THE Arris and Gale Lecture on "The Simulation of Surgical Affections by Hysteria" will be delivered at the Royal College of Surgeons, Lincoln's Inn Fields, on Wednesday, March 16th, 1927, at 5 p.m., by Hildred Carlill, M.A., M.D. This lecture promises to be extremely interesting, and Dr. Carlill, who is an old Guy's man, is illustrating his lecture with some photographs of his own cases.

We recommend those of our readers who can do so to keep this date free.

THE sum of £84 1s. 10d., the proceeds of the sale of Christmas Cards presented by Messrs. Ash & Co., Ltd., has been sent to the Treasurer of the Hospital. Each year Messrs. Ash & Co., Ltd., give to the Hospital this magnificent Christmas Box and we should like to take this opportunity of thanking them for such a generous gift towards the upkeep of the Hospital.

OUR thanks are due to Messrs. Nestanglo Swiss Milk Company for the loan of two model cats, used for the decorating of Cornelius Ward at Christmas.

Obituary.

Alfred Scott.

DR. ALFRED SCOTT.—At the age of 71 Dr. Alfred Scott died at Crowborough on December 22nd. Born at Brighton, he was the fourth son of the late Dr. S. L. Scott, who practised in the town, and was educated at Bradfield College. He studied medicine at Guy's Hospital and became M.R.C.S.Eng. in 1879 and L.R.C.P.Lond. in 1882. A few years later he settled at Brighton and held a number of appointments in the neighbourhood, besides having an extensive private practice. He was medical attendant at Brighton College during the whole of his practising life, which lasted nearly 40 years. He went to live at Crowborough on his retirement four years ago. Dr. Scott leaves a widow and four children, of whom two, Dr. Evelyn Scott and Dr. P. D. Scott, are members of the medical profession.

Henry Bertram Dismorr.

DR HENRY BERTRAM DISMORR, who died at Hallidays, Purton, on January 4th, was a son of Dr. Henry Dismorr, formerly of Lewisham. He was educated at Clifton and Guy's Hospital, obtained the diplomas M.R.C.S., L.R.C.P. in 1900, and after a two years' appointment as assistant medical superintendent at Lewisham Infirmary and medical officer of Lewisham Workhouse, commenced practice at Wroughton, Swindon, where he was much respected by his colleagues. For upwards of 20 years he struggled, with occasional breakdowns, against the pulmonary disease which led to his retirement in 1922, at the age of 45. Dr. Dismorr took a keen interest in all sports and was a prominent Freemason. He was honorary secretary of the Swindon Division of the British Medical Association from 1914 to 1923, and member of the Executive Committee from 1915 to 1923. He was also a member of the Wiltshire Borough Council from 1915 to 1923. He leaves a widow and one daughter.

John Caldwell Uhthoff.

JOHN CALDWELL UHTHOFF.—The death occurred at Bournemouth on January 19th, at the age of 70, of John Caldwell Uhthoff, M.D.Lond., F.R.C.S.Eng., who was until recently one of the best known physicians practising in Brighton and Hove, and President of the local branch of the British Medical Association. Educated at Brighton College, he studied medicine at Guy's Hospital, and qualified in 1877. Two years later he graduated as M.D.Lond., and in 1881 became a Fellow of the Royal College of Surgeons. At Guy's he won a considerable reputation both

in his work and as an athlete. Settling at Hove he soon acquired a large practice. Appointed physician to the Royal Sussex County Hospital and the Sussex Eye Hospital, he made a special study of diseases of the eye, and became widely known as a specialist. His advice was often sought by the judges of the local county court circuit, with whom he sat as assessor. About 12 years ago he took into partnership Dr. Frederick (Eric) A. S. Hutchinson, who, by tragic coincidence, died suddenly on January 6th whilst on holiday in Switzerland. Dr. Uthhoff retired from practice in the summer of 1921 and went to live at Bournemouth. He was twice married. His first wife was the daughter of the late Mr. Charles King, formerly of North Lodge, Enfield, and his second a daughter of the late Mr. F. G. Cuningham, of Bentley House, Hants.

Frederick George Larkin.

FREDERICK GEORGE LARKIN, F.R.C.S.Eng.—The death of Mr. F. G. Larkin, in his 80th year, removes a practitioner of wide interests and many talents. He received his medical education at Guy's Hospital, where he became President of the Physical Society, and it was before this Society that, in 1869, he read the

paper on Nephrostomy and Excision of the Kidney which opened his medical career so auspiciously. By its originality and suggestive value, this paper aroused wide interest and is said to have led to the use at Guy's Hospital of operative measures for the treatment of renal calculus and other lesions of the kidney. In recognition of this work and of the lifetime of service which followed it, Mr. Larkin, in 1915, was admitted an Honorary Fellow of the Royal College of Surgeons of England, and only a few days before he died he was gratified to see a reference to his work for renal surgery in the bicentenary issue of *Guy's Hospital Gazette*. Mr. Larkin's clear mind and confident judgment showed to advantage in the celebrated Wainwright trial of 1875, when his accurate evidence was largely responsible for the prisoner's final conviction, winning handsome recognition from the Lord Chief Justice. The care and thought which he brought to the solution of a forensic problem was also applied to his surgical work, and especially to the treatment of fractures. As a boy he was much in contact with agriculture and engineering, and in his hobbies as in his work he showed a mechanical turn of mind. In later years he took a keen interest in gardening and farm work at his home at Grove Park. During most of his life, however, Mr. Larkin's especial interest was in music. This enthusiasm dated from an early association with Canterbury Cathedral, not far from his birthplace at Hoath. In early days of practice he was choirmaster at Holy Trinity Church, Southwark, and later he held the same office at St. Augustine's at Lee. For many years also he was intimately associated with Westminster Abbey, where his old friend, Sir Frederick Bridge, was organist. As deputy also he sang in the choir at the Jubilee celebrations of Queen Victoria and at the Coronation of King Edward and King George, and he was, himself, the composer of a number of chants and of other church music.

Mr. Larkin leaves a widow. One of his sons is Dr. Reginald Larkin, of Southwark.

Publications Received.

Medical Review, Middlesex Hospital Journal, The Prescriber, The Dental Record, University of Durham Medical Gazette, Canadian Medical Association Journal, Kinki Fujinkwa Gakkwai Zassi, Nursing Mirror, Pharmaceutical Journal, Nursing Times, The Hospital Gazette, Birmingham Medical Review, Cambridge Gownsman, Manchester University Medical Gazette, Chemical Age, Bulletin of John Hopkins Hospital, Burma Medical Times, The Antiseptic, Indian Medical Record, Westminster Hospital Gazette, The Spectator, Medical Journal of South Africa, Long Island Medical Journal, Journal of Royal Naval Medical Service, Review of Reviews, Golf Illustrated, The Architectural Association Journal, London Hospital Gazette, King's College Hospital Gazette.

Stones in Common Bile Duct.

A Clinical Lecture given by Mr. R. P. Rowlands at Guy's Hospital on January 13th, 1927.

GENTLEMEN,—I have taken this subject of stones in the common bile duct for my lecture because I have three interesting cases to bring to your notice.

Case 1—When I saw this gentleman, in 1908, he had been jaundiced for three months, with remittent fever. He was wasted to a shadow, deeply jaundiced, and his body was covered with scratch marks on account of intolerable itching. The story he gave was that Sir X. Y. Z., one of the pioneers in this branch of surgery, saw him in 1904 at the end of four months' jaundice, which was thought to be due to some tropical disease, with complicating malaria. The patient was an Anglo-Indian, 62 years of age, who had spent nearly all his life in the East exposed to various tropical diseases. It was thought that his symptoms were not due to gall stones, particularly because he had no pain. He said his attacks of jaundice came on quite suddenly, but that they were never attended by any pain—there was intolerable nausea instead. During the whole of his long illnesses he had never had any pain. This is just the reason why I mention this case. In 1904 everyone was reluctant to believe that the man had gall stones, and an operation was vetoed again and again. At last the doctor in charge of him —Dr. Mitchell of Guildford—pressed for an operation because he felt that the man would die if nothing was done. The surgeon said he would not operate because he thought he could not do any good, but Dr. Mitchell persuaded him, and a large stone was found and removed from the common bile duct. The man recovered rather slowly. He remained well for four years, and then history repeated itself. I saw him in June, 1908, with practically the same symptoms as before. I operated on him and removed a stone, barrel-shaped and the size of a filbert, and facetted at at both ends, showing that it had been in contact with another stone. Probably it had been there for a long time, because there was only one stone present at the time I operated on him. I think it is probable that it had backed out of the way into the dilated hepatic ducts at the time of the former operation, the man being so ill that no great search could be made for more stones. The patient remained well for years and died at a good old age.

Case 2—A lady, an Australian, 47 years of age, married, with three children, all grown up, who has just gone out of Bright Ward. She had typhoid fever some twenty years ago. She had had no symptoms suggestive of gall stones until four years ago, when she developed jaundice, which has persisted ever since. She said she had had no pain. From time to time she had seen a large number of doctors and none of them had ever suggested to her or to her doctor that she had gall stones. The diagnosis was catarrhal jaundice, and so on. One celebrated surgeon ordered Violet Rays, which were well tried in vain. However, on my cross-examining this lady, she admitted that just before her first attack of jaundice four years ago she had quite a severe pain in the upper part of the abdomen. Nobody had ever got that history out of her until I discovered it on severe cross-examination. This is a very important point, because in diagnosis there is nothing comparable to an accurate history, and this you cannot get without careful cross-examination. You have to know what questions to ask, and that knowledge is acquired only by long study and experience. The patient admitted that she had had a bad attack of pain just before the jaundice came on, with vomiting and retching, but since then she had never had a recurrence of pain. She did admit also that the jaundice was not always as deep as when I saw her, but had varied from time to time. She was wasted, irritable and bad-tempered. It had been suggested that she drank excessively and that her jaundice was due to cirrhosis of the liver. When I saw her on October 11th, 1926, that is, four years after the onset of the jaundice, she was thin, very irritable, moderately jaundiced, bronzed and covered with scratch marks. I concluded that she had a stone in the common bile duct, and advised operation. She would not hear of it, but went to see several other consultants. One of them, a famous knight, said it was her skin that was at fault, and therefore sent her to a dermatologist, but he did not agree and sent her to a physician, who agreed with me. She saw both the surgeon and the physician again about the middle of December, when they agreed that an operation was necessary. The skin was still very bronzed and of a peculiar colour, but the urine was bile stained and the fæces pale.

At the operation I found three stones in the common bile duct. The gall bladder was shrunken. As the jaundice had lasted four years, and there was a good deal of difficulty in stopping the bleeding in spite of careful preparation, I did not remove the shrunken gall bladder, but simply

drained the common bile duct. The patient improved enormously in health and appearance while in the Hospital, and went away happy and well and quite free of jaundice, about three weeks after the operation.

Case 3—My clerk, Mr. Brown, has made the following brief and accurate abstract of an enormous sheaf of notes made in the Medical and Surgical Wards: R. E., married, aged 63. The patient saw Dr. Ryle at Out-Patients at the end of October, 1926, and again a fortnight later. He was jaundiced, and Dr. Ryle remarked an œdema of his ankles which the patient had noticed when tying his boots. His weight had been decreasing during the last two years—he had lost nearly two stone. He was admitted to Addison Ward on November 22nd, 1926, for jaundice.

History—Two years ago he had attacks of colic in the lower abdomen—these lasted six months. On October 2nd, 1926, he had acute pain in the epigastric region, which lasted two or three days. The pain was continuous and kept him awake at night. He next noticed his skin becoming yellow; it gradually became darker, and now varies from day to day. The stools became clay-coloured and bulky and the patient has had diarrhœa since October 2nd. He has pain in defæcation and often passes bright red blood. The urine became dark-coloured with the onset of jaundice. The œdema of his ankles disappeared while in Hospital.

Condition on Admission—The patient's appetite was good, but his teeth were poor; his tongue was coated. The abdomen was rather full, and he was tender below the right costal margin. The liver was enlarged, extending three fingers breadth below the right costal margin; its surface was smooth. The gall bladder was not palpated. R.E. normal.

Urine—Sp. gr. 1010 acid. No albumen, sugar or blood. Bile pigments present. Dr. Ryffel found a deposit containing scanty pus cells.

Pulse 80, *hæmoglobin 96 per cent.*
Blood pressure, 140 systolic, 80 diastolic.
Red corpuscles 3,700,000 per c.mm.
Leucocytes 4,600 per c.mm.
Wassermann Reaction Negative.
Clotting time normal.

Fœces Examined—Strongly positive guaiac reaction. No blood spectra. No evidence of pancreatic deficiency. Markedly deficient in stercobilin.

Barium Enema and X-Ray Examination—No evidence of obstruction as far as splenic flexure.

November 30th, 1926—Dr. Hurst lectured on this patient and emphasised the preliminary attack of pain. He thought the diagnosis lay between catarrhal jaundice and a stone in the common bile duct. As the jaundice had lasted eight weeks he recommended laparotomy.

Dr. Ryle and Mr. Rowlands agreed, but in spite of all advice the patient preferred to wait until the new year.

January 3rd, 1927—The patient was admitted to the Surgical Wards and was operated upon. A stone was found in the common bile duct and another impacted at the neck of the gall bladder, which was large. The stones were removed and drainage tubes fixed in the incisions in the gall bladder and the common bile duct. The head of the pancreas was slightly enlarged, probably due to secondary pancreatitis. No evidence of a growth could be felt.

This man is doing fairly well now, but has been an anxiety because he has had cardiac symptoms with an intermittent weak pulse and a sub-normal temperature. There is no sign of sepsis. We are still draining the gall bladder and the common bile duct. The condition of the heart is probably due to the absorption of toxins from the common bile duct as a result of the long-continued impaction of the stone and cholangitis. Sir Humphrey Rolleston has written upon this subject pointing out that people with gall stones sometimes get cardiac symptoms, and even pseudo-angina pectoris, due to cardiac muscle degeneration. I have often noticed that these symptoms pass when the gall stones have been removed and the passages have been drained.

This patient is gradually getting well. His jaundice is slow to clear, but this is natural for long-continued jaundice. I did not remove his gall bladder for, although his clotting time was said to be normal, I was cautious because I feared bleeding and cholæmia after the operation. He was bleeding too freely during the operation in spite of the fact that his clotting time was said to be normal. I think he would have had a much worse time if I had removed his gall bladder, and I argued that it was not necessary. The gall bladder was not very large; we emptied and drained it. I thought that recurrence of symptoms was unlikely in a man aged 63 when the natural expectation of life is not very long, but if symptoms do recur I shall be quite willing to remove the gall bladder later on. If a man has chronic jaundice we should not do more than is absolutely necessary for the removal of the obstruction, especially when the patient is old and feeble. This patient had already suffered from œdema of the ankles and a very imperfect circulation.

Symptoms and Signs—I will deal next with the symptoms and signs of this condition of stones in the common bile duct. The association of jaundice with colic is most important. Sometimes the colic may be replaced by nausea and vomiting. I have had several instances, two of which I have mentioned to-day. Until I cross-examined there was no history whatever of pain in my second case, and

there was not much in the third case. The following are the characteristics of this type of jaundice: It is remittent, or even intermittent; it is generally moderate in degree, not black jaundice like that of growth. Jaundice is best studied in the conjunctiva. The patients have, of course, intermittent bile-stained urine and intermittent clay-coloured motions. These patients often have anorexia, and therefore waste a good deal, but not so much as when cancer is the cause of the jaundice. They often have fever due to infective or suppurative cholangitis. They always have, with long-continued or remittent jaundice, enlargement of the liver, which, however, is perfectly soft and smooth on the surface. There is no enlargement of the gall bladder. There is a guiding rule that jaundice without enlargement of the gall bladder is probably due to gall stones, and vice versa. This was pointed out by Courvoisier, and also by Murchison, many years ago. It is a very important observation, but it has exceptions. For instance, a patient may have deep, long-continued jaundice, without enlargement of the gall bladder, due to growth obstructing the common *hepatic* duct. In such a patient gall stones are strongly suspected until the real condition is disclosed by operation, and the mistake is all the more likely because of the severe pain which is usual in these cases. Further, the opposite mistake may be made; for instance, coincident impactions of stones in the cystic and common bile ducts may give rise to jaundice associated with enlargement of the gall bladder. In these cases it is vital to make the diagnosis without delay so that, if an operation is necessary, it can be done before it is too late to hope for the best possible results.

The first essential is to realise the possible sources of error. The most common is catarrhal jaundice, but this is entirely devoid of pain. It is slight, and rarely lasts more than three weeks —there is no serious wasting. Occasionally, catarrhal jaundice lasts six weeks, but that is about the extreme limit. In two of the cases I have mentioned to you the jaundice, which was due to gall stones, had lasted over three months, and in one of them it had been remittent for four years.

Malignant disease of the pancreas and pancreatitis are both very serious sources of error. It is sometimes impossible to distinguish these two diseases from stones impacted in the common bile duct. We have to find out by operation in some cases.

Cirrhosis of the liver and growth of the liver both give rise to jaundice, sometimes with severe pain from perihepatitis, and have been mistaken for gall stones, but the liver is too hard and irregular and the pain atypical and unlike true biliary colic.

Roughly, for your guidance, in trying to get at all the possible sources of error, you should consider the bile ducts in the way Dr. Lauriston Shaw used to teach us to consider any duct—*i.e.*, to think of the things that may obstruct (1) by pressure from outside, (2) by growing in their walls, or (3) by foreign bodies inside.

(1) Take, first, external pressure upon the ducts. We may have chronic pancreatitis or growth in the head of the pancreas pressing on the common bile duct. I have seen hydatid in the same position causing obscure jaundice; aneurysm may do the same. Late carcinoma of the pylorus is a much commoner cause. Duodenal ulcer sometimes causes retro-peritoneal inflammation and pressure upon the common bile duct, leading to jaundice. The common hepatic and common bile ducts are often pressed upon by secondary malignant glands or tuberculous glands in the front wall of the foramen of Winslow. I have known a man have piles removed and then an operation for jaundice, when the real and unsuspected cause of his trouble was a cancer high up in the rectum. Pressure on the small ducts in the liver may come from a growth in the liver, either a primary or a secondary growth, or from cirrhosis of the liver due to alcohol or syphilis. These are the most important causes of pressure on the ducts.

(2) *Stricture of the Wall*—We may have stricture of any of the bile ducts following operation, disease or injury. Carcinoma may come in any one of the ducts, and so may papilloma. They are only common in the common bile duct, sometimes occurring at the duodenal papilla. I have had several cases of cancer in the ducts which have been extremely difficult to diagnose; severe pain adds to the difficulty. When the gall bladder is not enlarged the difficulties increase; an exploration becomes necessary and we find a growth, perhaps in the common hepatic duct as already mentioned.

(3) *Foreign Bodies*—In two cases where I expected to find gall stones I found small hydatid cysts impacted in the common bile duct—the parental cyst in the liver was removed. There have been cases where a round worm has found its way into the common bile duct and blocked it. Sir Hugh Rigby reported such a case. I myself had a case where a clot formed in the common bile duct, blocking it and causing typical biliary colic quite indistinguishable from that due to stone. I published an account of it in the *Guy's Hospital Reports* some fifteen years ago. It was a case in which I had removed a stone from the common bile duct and then closed the latter completely. I thought it probable that I had left a stone behind. I re-operated ten days later and found an enormously dilated common bile duct,

incised it and let out an organising clot that had formed in this duct as a result of bleeding from the incision in its wall. The man soon recovered after getting rid of the clot. Phosphorous poisoning and acute yellow atrophy of the liver cause jaundice with considerable pain, but not the severe spasmodic pain which we know as biliary colic. However, I recently made the mistake of exploring a patient who was suffering from acute yellow atrophy.

These are some of the things that may give you trouble in diagnosis, but, really and truly, the difficulties are not so great as this long list would imply. You have to remember chiefly that the association of true colic with jaundice—remittent or intermittent—is characteristic of gall stones in the common bile duct. You will not often make mistakes if you keep this fact in mind.

What are the accessory methods of diagnosis in these cases? Examination of the blood for bile may give important evidence of obstruction, but not much evidence of the character of the obstruction. You have just heard, in the report of one of the cases I mentioned, that "There is no evidence of pancreatic deficiency on examination of the fæces and urine." Cammidge described a method of value in telling whether the pancreas is affected or not; if examinations show a lack of digestion of the fibres of meat and of fat the pancreas is not secreting the normal amount of pancreatic juice. The X-Rays are of little value in proving the presence of gall stones in the bile ducts—the stones are too small, too deeply placed and too translucent. For stones in the gall bladder, however, the improved methods of cholecystography are of real value, although a negative report is never conclusive. In the majority of cases we are driven back, for the purpose of diagnosis, to time-honoured symptoms and painstaking clinical observations.

What is the natural history of stones impacted in the common bile duct? The colic ceases generally as the stone falls back, and the patient jumps to false conclusions. He thinks he is cured, but the attacks come back again. Occasionally, the impacted stone, which may be smaller than a grain of wheat, passes. After being impacted, perhaps for three or four months, in the common bile duct it may ulcerate through the narrow end of the duct into the duodenum and the patient gets well spontaneously, but that is a very rare and risky way out. More patients die before this happy issue can take place of cholangitis, cholæmia or hæmorrhage.

By medical treatment you cannot do very much for gall stones in the common bile duct. You can ease the pain, but not cure. You can give antiseptics such as urotropine, 80 grains a day, with a similar dose of citrate of potash, as recommended by Hurst and Ryffel and aspirin or salicylic acid may be given with the same object; but in the main medical treatment is only palliative.

It is different with surgical treatment. I have not time to go into all the methods of treatment from a surgical point of view. There are certain general rules that should be observed. It is not wise, as a rule, to operate on stone in the common bile duct during an attack of pain, because the patient is "shocked" and unprepared, and is therefore not likely to stand the operation so well at that time. It is far more important to realise that it is not wise to operate for stone in the common bile duct in the presence of fever, indicating infective or suppurative cholangitis, because the mortality is greater. It is safer to wait for an interval when the pain and fever have abated. Another rule is that you must not allow or recommend your patients to suffer jaundice for long, because this adds to their danger of death from hæmorrhage, sepsis, cholæmia or from cardiac degeneration. It is rarely wise to wait for more than two or three weeks in cases of this kind. When the diagnosis of impacted gall stone in the common bile duct is made the sooner the operation is done the better. There is no advantage in waiting except for the reasons given above.

In every case, when the common bile duct has been opened, it is wise to drain it. That is very important. It is not wise, as a rule, when jaundice has lasted any length of time, to do a cholecystectomy with the idea of preventing the reformation of stones. It is better to deal with one thing at a time, to save life by removing the stones, and if the symptoms recur we may then have to take away the gall bladder with greater safety.

Finally, I must remind you that surgery can do something for most cases of jaundice, especially when the gall bladder is enlarged. Even if the cause cannot be removed cholecystrostomy will relieve the jaundice and intolerable itching. It generally prolongs life and improves nutrition even in cancer cases; in chronic pancreatitis it often brings a complete cure in apparently hopeless cases.

I will show you some pictures, most of which are illustrations from the *Operations of Surgery*, the 7th Edition of which is about to appear. It has taken Mr. Philip Turner and myself several years of hard labour to get it ready for the press.

After throwing on the screen views of the gall bladder in section and of the Perthes and other incisions for the removal of gall stones, the lecturer said:

The aim of the surgeon in all cases of stones in the common bile duct is to push them back into and to remove them from the first part of the duct. It is infinitely easier and safer to do this than to incise any other part of the duct. In order to be able to back them it is wise to do this before relieving the pressure inside the duct. If you maintain the fluid pressure inside the duct it is much easier, otherwise the wall of the duct collapses and gets in the way. Sometimes you cannot get it back. If a stone is firmly fixed in the second part of the common bile duct the duodenum should be mobilised and turned to the left and, at the junction of the duodenum and the pancreas, the duct should be incised to get out the stone. This, however, is not so safe as pushing the stone back, whenever possible, to the first part of the duct. When the stone is impacted at or near the duodenal papilla and cannot be shifted, a longitudinal incision should be made in the duodenum, to expose the duodenal papilla and to remove the stone. This, again, is nothing like as safe as removing the stone from the first part of the duct, but it has to be done when you cannot do anything better. Then you sew the wound in the duodenum very carefully in a transverse direction, to prevent narrowing of the channel, and placing three layers of sutures to prevent leakage which is very apt to follow this operation. Sometimes, when you operate on the common bile duct, you find a stricture due to impaction of a stone for a long period. In that case you make a longitudinal incision through the stricture and sew it up transversely.

When jaundice has not lasted too long, when the clotting time is normal and there is disease of the gall bladder, the latter may be removed, if this does not seem to add to the risk of the operation in this particular case.

Synthetics.

A Paper read before Guy's Hospital Dental Society by R. L. Duchesne.

MR. CHAIRMAN AND GENTLEMEN,—I was influenced considerably in my choice of a subject for to-night's paper by a conversation I had some time ago with a demonstrator, who has but recently left the Hospital. He was kind enough to give me much useful information, which roused the interest to proceed further and to delve among the reports of investigators into the "why and wherefores" of synthetics. The subject is, I find, one of very wide scope, but I have endeavoured to pick out the more important facts, and I beg that I may be pardoned the omissions which, in a paper of this nature, are numerous, but will perhaps lead to subsequent discussion.

Synthetic porcelains or translucent cements were first introduced to the notice of dental surgeons in this country about 1875, but, owing to their crude composition and uncertain behaviour, were not very widely used. In 1879 Fletcher, of Warrington, produced a new cement, similar to Portland cement, which, however, owed its setting to the reaction of silicates. Subsequent experiments enabled the main features of Portland cement, strength and insolubility, to be retained, and others, such as translucence adaptability, absence of volumetric change and tooth shades to be added.

A typical modern synthetic has been shown, on analysis, to contain:

Silicon dioxide	36.91	per cent.
Aluminium dioxide	33.69	„
Phosphorous pentoxide	4.00	„
Sodium oxide	15.88	„
Calcium oxide	7.26	„
Water	2.26	„

while the liquid has proved to be a modified phosphoric acid solution containing zinc aluminium phosphates to the point of saturation.

These constituents give to a synthetic filling its main characteristics, but are unfortunately also the cause of its disadvantages as a filling material.

We are, perhaps, only too familiar with the state of affairs, when a cavity has been excavated and a synthetic filling inserted therein with the utmost care, to be followed sooner or later by a report from the patient of the symptoms of acute pulpitis, which may eventually lead to the death of the pulp.

The reason of this has been sought by several investigators, who each have produced evidence which, added together, serves to show the reason for such an undesirable result. Mr. Doubleday has demonstrated that the reaction of the powder and liquid, when mixed together, is acid in character, a finding which has been confirmed by Faisoli of Milan and Rohrer of the Hamburg University Dental Clinic. The latter, after numerous experiments, has stated moreover that the weaker the mix the stronger is the acid reaction, while the

result, relative to obviating any deleterious action, is obtained by mixing in as much powder as possible with the liquid. Cecil Pincus, an Australian, has gone further by demonstrating that not only is free acid produced on mixing, but that this acid is volatile, and that its volatility is increased when in a cavity by the warmth of the tooth.

Mr. Doubleday, in addition to his other findings, suggests that the aluminium content of the powder may be responsible for the transmission of thermal shocks to the vicinity of the pulp.

A consideration of these experimental findings suggests the means whereby we may, as far as possible, minimise the possibilities of injury to the pulp. All caries should be thoroughly removed, even if it means that the patient has to attend at intervals, and the cavity has to be filled temporarily with zinc oxide and oil of cloves, should the neighbourhood of the pulp be involved.

When the cavity is clean it should be shaped just enough to ensure adequate retention, and the free edge of the enamel must be left square on section, so as to secure maximum strength, a better blending of the translucent cement with the enamel, and the elimination of the thin white line, which is often seen round synthetic fillings and is an indication of enamel weakness.

After the cavity has been fully prepared the tooth must be isolated against moisture, either by the rubber dam or by touching the gum with 10 per cent. trichloracetic acid and then painting it with sandarac varnish. Cotton wool rolls, held in position either by a Hare mouth prop or gum tragacanth, should in addition be placed in the sulcus. It should be noted, however, that the use of trichloracetic acid is contra-indicated if the gums are at all inflamed.

If the cavity extends fairly deep it should be dehydrated, without actually involving the pulp. It should be dehydrated with absolute alcohol and a small crystal of phenol placed therein and melted with warm air from a chip syringe. The dentinal tubules will not be penetrated to any great depth, but their ends will be coagulated and so sealed off. In addition, a thin layer of zinc oxide and oil of cloves should be inserted and then covered by a layer of ordinary cement, which should be allowed to set hard before the synthetic filling is put in.

In shallow cavities a lining of ordinary cement, hard set, will be sufficient to isolate the pulp from chemical or thermal shock, provided that the dentine is fully covered. If necessary this cement can then be slightly shaped to assist in the retention of the filling.

The technic of filling the cavity must now be considered, and there is a choice of methods available which differ slightly, but have one point in common and that is speed both in mixing together the powder and liquid and in inserting the prepared mix into the cavity. It therefore behoves one to select the best materials available and to follow implicity the technic advised by the manufacturers and, further, to understand the reasons underlying these instructions, as the secret of success lies in the comprehension of the difference of setting between a zinc and a silicate cement.

Zinc oxide powder, when mixed with orthophosphoric acid, is dissolved and a new compound formed, which at once starts to harden into a crystalline mass. These crystals interlock throughout the entire mass and, even if disturbed, new crystals are formed to maintain the integrity of the whole until hardness is attained.

The chemical process involved in the setting of a silicate cement, however, is quite different. Each molecule of the powder contains certain elements, alumina and silica as well as fluxes or binders. When brought into contact with the liquid colloidal silica and aluminium phosphate are produced by solution of the finer particles of powder. This mixture hardens, not by crystallisation, but in the same way as a jelly sets and it is well known that a jelly, once broken, cannot be reunited.

This setting reaction of a silicate cement may be divided into three stages:

(1) The reaction carried out during the manufacture of the liquid, which is affected by the solution in the liquid of some of the constituents of the powder.

(2) The reaction which is effected when the dental surgeon mixes powder and liquid.

(3) The reaction which continues in a completed filling.

The second stage is in the nature of a heterogeneous reaction, as the reacting substances are in different states—one a solid and the other a liquid—and it is an undoubted fact that the larger the surface of a solid in contact with a liquid the more rapid will be the action, hence the powder of a synthetic is ground as fine as possible.

We have, then, the manufacturer controlling the first stage of the setting reaction by dissolving some of the powder in the liquid, while the operator controls the second by drawing a large quantity of powder into a relatively small amount of liquid, with a resulting rapid reaction in the mass and quick setting, and the possibility, if he has brought in too much powder, of obtaining a weak and unstable cement.

If, on the other hand, he has mixed the powder in small portions and thoroughly spatulated them, the concentration activity of the acid is progressively reduced and a slow setting cement results. Extreme action in this direction, together with overspatulation, would retard the setting to the point of disaster and produce as poor a cement as excessive rapidity in mixing.

A middle course is advisable, whereby the momentary concentration of free acid is not progressively reduced but equably satisfied and this course gives us ample leeway in the manner of mixing, which should be carried out with an agate spatula on a *cold* glass slab.

An average filling requires two to three drops of liquid to about five times its bulk of powder; care should be taken to prevent the evaporation of the liquid, as this would cause slow setting and consequent loss of strength, and to keep dust and other foreign matter from the powder. The powder should be brought into the liquid in large quantities and mixed with a rotary motion, with an avoidance of overspatulation. All that is required is to ensure that the whole of the powder is wet and that the final product is of such consistency that when the spatula is lifted the mix will not draw out to a thread, but break off short. This part of the process should not take more than one minute. The mix does not start to set as a jelly until another minute has passed; this interval is the period of grace allowed for the insertion of the filling, therefore once the silicate has been inserted with either a tantalum or stainless steel instrument, free from grease or dirt, into a cavity in slight excess, it should be left alone for at least three minutes, as any instrumentation, after the jelly has started to form and before it has hardened beyond the point where motion is impossible, will cause it to set in a cracked granular mass. Thus, any attempt at this stage to shape the filling will ensure its failure.

Before starting to mix the powder and liquid a celluloid strip should be placed in such a position, in relation to the cavity and rendered immovable, that it could be easily bent round the cavity and forced on to the filling with a straight pressure and held there for at least three minutes, thus driving the cement well home. In no circumstances should the strip be coated with vaseline, which would be incorporated into the cement while setting and be subsequently washed out leaving a pitted surface. After the expiration of three minutes the strip should be lifted off the cement—*not* slid off—as the latter might tend to dislodge it or to spoil its shape.

The third stage of setting reaction now commences and lasts for any period up to twenty-eight days, during which time the cement improves in translucence and increases in hardness and impermeability.

At the commencement of this period, before the dam is removed, the cement must be coated with a waterproof varnish, which must stay on for at least fifteen minutes. At the end of this time the filling may be shaped and polished, although it is advisable to leave this to a subsequent sitting.

It would be well to emphasise here that during these fifteen minutes, which produce what one might term an ordinarily perfect setting, the filling must be kept absolutely free from moisture. Later, however, moisture is essential to its well-being and any dryness at a later stage will be as detrimental as moisture in the beginning.

The correct adaptation of the celluloid strip to the tooth before the mix is made will save many minutes of polishing and will help to eliminate excess either at the biting edge or gingival margin. This is a great help, as polishing at the gingival margin often results in laceration of gum tissue and subsequent discolouration of the filling. The practice of burnishing over the matrix with a plastic instrument should be avoided, as it prevents the proper hardening of the mass and in reality works the cement away from the margins of the cavity. Good marginal adaptations can only be obtained when the material is in its most plastic state, that is during its insertion, and must not be attempted afterwards. The use of the strip further obviates the necessity for the filling of a cavity from the lingual or palatal aspect, as it forms the posterior wall of the cavity and so prevents the filling being in excess on that side.

Translucent cement may be used in a variety of situations and has even enough edge strength to take a biting strain, provided that it has a secure foundation and that its edge is bevelled. Ordinary or window inlays can be faced with this material, which will also be found useful in replacing a broken Steele's or other facing, while for an ordinary interstitial cavity in an incisor tooth it forms, if of the correct shade, a filling preferable to any other.

It would, however, be too wearying at this point to enter into a detailed description of the many uses of synthetics or of the technique of strip manipulation, both of which would take far too long.

In conclusion, I would like to acknowledge my obligations and express my thanks to the authorities from whose articles or reports I have ventured to quote and to thank you, gentlemen, for your attention.

Correspondence.

Herpes Zoster and Varicella.

DEAR MR. EDITOR,—That there is a relationship between chicken pox and shingles has been remarked so frequently of late in both text books and the medical journals that for fear of seeming to want a little cheap advertisement (?) I have hesitated to rush into print with the following details.

A lady consulted me on Christmas Eve on account of a rash, then four days old, which was a typical intercostal herpes. She was anxious to know whether she was "infectious," as she had a house party which included several adults and three grandchildren. I told her that shingles was not in itself generally regarded as infectious, but that it had some connection with chicken pox and that the children might develop the latter. As they had been with her already for five days I did not consider it necessary to isolate her. Unfortunately, I did not recommend the quarantining of the children, and they were allowed to go to numerous parties during the Christmas season.

On the sixteenth day they all developed chicken pox, and two days later came the news that one of the adults—who had gone away in the meantime—had been "stricken down" with "spots" while at the County Hunt Ball!

I have since had cases among the maids at the house, but have refrained from inquiring how the second trail has kept alight. I need hardly say I have made exhaustive but unavailing efforts to find an alternative origin for the epidemic.

In future, sir, I am quarantining my herpes' contacts, and living in hopes that your circulation in this neighbourhood is not extensive.

Yours, Pro Bono Publico,

R. B. FAWKES.

Guy's Hospital Musical Society.

THE following represents the accounts of the Musical Society for the year 1926. Except for the balance of £35, with which the Society started the year, the figures cover the production of the *Gondoliers*. It is satisfactory to note that after all expenses were paid a profit of over £60 remains.

ASSETS

	£	s.	d.
Brought forward from 1925	35	0	9
Feb., Received from Secretary from sale of Tickets	24	8	0
April and May, Received from Secretary from sale of Tickets (*Performance postponed owing to General Strike*)	42	2	6
Oct., Received from Secretaries from sale of Tickets	96	0	4
Oct. 12 „ „	80	2	10
Nov. „ „	131	1	6
Nov. 30 „ „	22	0	2
Dec. 7, Returned from Customs and Excise	24	0	5
	£454	16	6

EXPENDITURE

	£	s.	d.
March, D'Oyley Carte Co.	22	2	0
„ Guildhall School of Music	21	0	0
April, Customs & Excise	75	0	0
Oct., to Orchestra	63	15	0
Nov., Producer	21	0	0
„ Instrumentalists	6	16	6
„ Refreshments	19	10	0
„ B. J. Simmons & Co., Costumes	49	10	0
„ D'Oyley Carte Co.	10	13	4
„ Chiswick Scenic Studios	18	18	0
„ Printing, Ash & Co.	14	5	0
„ Guildhall School of Music	24	12	6
„ Cheffins	5	0	0
„ Flowers	3	13	6
„ Secretarial Expenses	5	18	0
„ Conductor's Honorarium	31	10	0
„ Balance in Hand	61	12	8
	£454	16	6

JOHN FAWCETT, *President.*

D. M. MOLLISON, *Hon. Treasurer.*

Bridge

THERE has certainly been no difficulty in settling which are the twelve best hands for the Competition, because twelve hands have not been sent in. There are only two conclusions to draw—either that readers find no difficulty in deciding their correct calls or that they do not want a Competition. Nevertheless, we hope that some energetic players will forward some hands, so that it is possible to begin the Competition in the next number.

This week the question of when—and when not—to take your partner out of a no trump is to be discussed. In considering this question it is assumed that the player who called the no trump was either dealer or second caller when dealer had passed. It is necessary to be quite certain what that one no trump declaration means. This is usually considered to be four tricks, distributed through three suits, although many players call on four tricks in the minor suits. Anything slightly above an average hand may be classed as an original one no trump.

Let us first deal with the take-out in the major suits. A call of two spades or two hearts is made with the primary intention of telling one's partner that game is more likely to be made if a major suit is trumps. But it is also made with a secondary intention of giving information to your partner. A call of two is sometimes made on a strong holding, sometimes as a "rescue." If constant information is to be given, one of these holdings must be ear-marked for that purpose. Experience shows that it is better to call two on the strong holding. Very often it tells the partner that he may safely advance in his no-trumps; even more often that a suit call is preferable. Two examples will suffice.

Dealer has:

Spades—Q J 9
Hearts—A 10 6
Diamonds—A K 9 5 3
Clubs—9 7

and calls one no trump. Second player passes and third player has:

Spade—8 6
Hearts—K Q 7 3 2
Diamonds—6 2
Clubs—A 10 5 4

and calls two hearts.

In no trumps it is questionable if the contract of two would be made; whereas in hearts game should be certain. If, however, dealer has

Spades—A Q 4
Hearts—9 8
Diamonds—A K 9 5 3
Clubs—Q 9 8

and calls—quite justifiably—one no trump, second player again passes, third hand has the same as in the previous example and again calls two hearts, then this time the dealer knows that his partner has a strong holding in hearts and that he himself is weak and therefore bids two no trumps. There is a reasonable possibility that game can be made in no trumps, whereas in hearts the opponents should have no difficulty in collecting four or five tricks. The hands given in the first example occur much more frequently than those in the second; that is the reason it is usually more profitable to have a major suit call of two alone. Nevertheless, occasions do arise when it is wise to revert to the no trump declaration after a take out into a major suit.

The rescue call of two is made on a holding of five with one honour at least and the rest of the hand below average strength. Such a hand as

Spades—8 6
Hearts—J 10 7 3 2
Diamonds—J 6
Clubs—J 10 5 4

sometimes induces a player to rescue his partner from a one no trump declaration with a call of two hearts. If the original caller has the hand given to dealer in the previous example the experiment is disastrous. The chances are that the contract in no trumps will be fulfilled, whereas a trick in spades, three in hearts and two in clubs will defeat the contract of two hearts. The rescue is reversed and it fails so frequently that it costs practically nothing to keep a call of two of a major suit confined to strong holdings.

There are, of course, many hands where it is obvious that even without top honours a major suit is preferable. Holdings of six or more with short suits are better played in a suit call, but in these cases usually the opponents bid and then the opportunity for showing length occurs. Suits of seven and over should be bid as two, and, if two no trumps are called, the player should then call three of the suit. Exceptional strength should be shown by bidding three of the suit.

The question of taking out a no trump bid into a minor suit is not as satisfactorily agreed on as taking out with a major call. Strength in a minor suit is just as useful to a no trump as strength in a major suit, but as a producer of game in a suit declaration it is not so useful. For this reason it is usual to reserve a bid of two of a minor suit for a weak holding of six of the suit. The same argument with a weak holding of five of a major applies to the minor suits. As was pointed out in the last number, exceptioanl holdings in the minor

suits should be bid, and they are usually bid as three, over a one no trump. The following hands will illustrate this.

Dealer has :

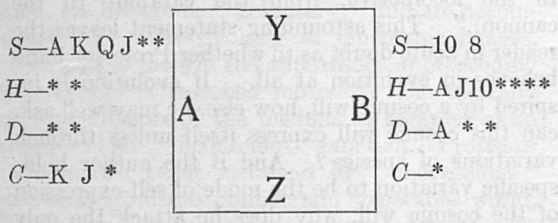
Spades—A K 10
Hearts—A J 10
Diamonds—A 6 3
Clubs—9 8 7 2

and calls one no trump. Third player has :

Spades—Q 9 2
Hearts—K 8 4 3
Diamonds—K Q J 10 7 2
Clubs—None

A slam—possibly grand slam—will be made in diamonds. In no trumps the opponents would make five clubs before the dealer had a chance of getting in.

The solution of the problem in the last number is given below :



Dealer

Unfortunately, in the last number, B was given only six instead of seven hearts. We apologise for this error.

The calling was—Z no bid, A one spade, Y two diamonds, B two hearts, Z no bid, A two spades—all pass. Y leads the three of hearts.

The lead of the three of hearts is obviously a singleton. This means Z has K, Q and another. Hearts, therefore, cannot be cleared by leading the knave after winning the first trick with the ace, and, even if they could, if the ace of diamonds were forced, A would have no re-entry into dummy—after clearing the trumps—to make the established hearts.

The correct play is to win the first trick with the ace of hearts and to lead the small club from dummy. Z must put the ace up on the singleton if he has it. If he has not got it, A plays the knave hoping to find Y without the queen. Y must then lead a club, diamond or spade. If a club, A wins it with the king and trumps his third trick with the ten in dummy. If a diamond, he takes it with the ace in dummy and leads the eight of trumps and then plays the clubs as before. If a spade, he wins it in his own hand and then plays the clubs, trumping the second one in dummy. He loses in this way one club, one heart and one diamond, and makes four spades. If the clubs are A Q * in Y's hand he cannot make game.

Guy's Hospital Christian Union.

The London Campaign. Foreword by the Bishop of Manchester.

TO understand things is to see them fitting together in their places in the general scheme of the universe ; and as students it is our job to understand things as far as we can. The difficulty is to form a scheme of the universe which begins to do justice to, and make room for, all the sides of our experience. If there is such a scheme, we ought to examine it and see if it really meets the requirements.

This is not a purely theoretical question. In practical matters also we need general principles that will bring some unity into the chaos of our personal interests and the corresponding chaos of the world's life. Till we have found such principles we cannot hope to solve our own problems or take our share in solving the world's problems.

Christ said " I am the Way, the Truth, and the Life." All over the world people are turning back to Him to find out if that is really so. If it is, then of course we must come to Him to find the principles on which the life of the world, and our own lives as part of it, must be governed if we are to have done with things that everyone wants to be free from. We ask all London students to join in this enquiry, by attending the Campaign meetings, when the claim of Christianity to the reason and conscience of men and women will be set forth. Christianity is either what the whole world, and every person alive, really wants, or else it is a sham. And in a time like ours it is the duty of everyone to find out enough about it to decide in his own mind which of these it is.

List of Meetings in the Hospital

Tuesday, February 15th—1.30–1.55, Dr. Alex. Wood, " Religion and Science," in the Physiology Theatre. 4.30, Father Vernon, S.D.C., in the 'Spit.'

Thursday, February 17th—1.30–1.55, Dr. Leonard Browne, " Psychology and Religion," in the Physiology Theatre. 4.30, Father Vernon, S.D.C., in the ' Spit.'

Friday, February 18th—1.30–1.55, Father Vernon, S.D.C., in the Physiology Theatre.

Reviews.

Brain and Heart. By GIULIO FANO. Published by the Oxford University Press, Milford. Pp. 137. *Price* 7*s.* 6*d.*

THIS is a very peculiar book. It is, as Professor Starling points out in a foreword, in no sense a monograph upon the organs after which the book is named. The scope of the book is far less circumscribed than this, for in it Professor Fano aims at nothing less than a statement of the outlines of his life work and of his philosophy. It is, therefore, a work which it is impossible to review with brevity.

The considerations propounded by this author are in places exceedingly difficult to resolve into anything approaching a coherent argument. This quality of apparent inconsecutiveness is especially marked in the first chapter, which may easily deter the reader from proceeding further with the book.

The first two chapters are devoted to "The So-Called Living Matter." The book begins with a warning against the careless use of phrases, one of the most abused of which is the phrase "living matter." What is meant by "living matter?" By biologists and writers on biology the term is used in a sense over which purely chemical and physical considerations predominate.

Professor Fano is persuaded that an adequate understanding of living matter can never be achieved if it is thought of solely in these terms. At the same time, chemistry and physics have taught us much about living matter. It is to a substantiation of this last thesis that the first chapter seems to the reviewer to be devoted. Compressed into 28 pages, it consists of a cursory and exceedingly confusing review of the properties of antibodies, colloids, enzymes, hormones, oxidising and reducing substances and the so-called "receptor substances" of Langley. The following subjects are also referred to: The bearing of the endocrine glands on histogenesis and ontogenesis, tissue cultures and the causes of tissue hypertrophy. To the staggered reader who has completed this chapter there will occur one impression which will hover over the chaos in which his mind will ineffectually be groping—namely, that if unintelligibility is an attribute of genius, Professor Fano must know a lot about biochemistry.

But he will be comforted by the beginning of the second chapter, where it is stated that the phenomena of life are much more complex than the foregoing remarks suggest. They are, in fact, so complex that they can never be properly elucidated or even interpreted in terms of chemistry and physics. The author then turns to the question of evolution, particularly to the problem of variations which are the raw materials upon which selection works. The Darwinian theory of variation by an accumulation of insensible variations —*natura non facit saltum*—and the theory of de Vries based upon the conception of mutation are both rejected as being based upon insufficient evidence. How, then, has evolution proceeded? Professor Fano answers by falling back upon the position of the vitalist: "The will to live," "the cosmic will," "the vital force"—the author employs all three terms. "... moulds living beings using some of the first made forms to create new ones, better and stronger in their adaptations for more numerous and varied ends (like the human will which made stages of progress from the sledge to the locomotive, from the catapult to the cannon)." This astounding statement leaves the reader in acute doubt as to whether Professor Fano believes in evolution at all. If evolution is inspired by a cosmic will, how else, he may well ask, can this cosmic will express itself unless through variations of species? And if the author holds specific variation to be the mode of self-expression of the cosmic will, why does he attack the only two possible theories of variation—the theory of "insensible" variations and of mutations?

The passage in brackets, quoted above, suggests that Professor Fano believes in a sort of systematised special creation—that the cosmic will now and then just materialises in new forms, as it would have done if we were to wake up one morning and find in the park a herd of animals with six legs, horns and feathers that had apparently materialised out of the ether.

After all, sledges do not beget locomotives, neither do catapults bring forth cannons. Yet these are the similes which Professor Fano has chosen. It seems clear that if species are to be born of pre-existing species, they must appear in their offsprings as variations of some sort. But the author seems to reject variations of all sorts. This impression—that Professor Fano is a special creationist—is enhanced by the concluding sentence of Professor Starling's introductory foreword: "There is no doubt that his younger readers will be fired to emulate the actual achievements of the author and to continue his adventure rather than stay with him in his verbal retreat. Experience and experiment have justified, and continue to justify, the axiom that there is *no discontinuity in the chain of causation, nor resting place for those who would trace out its links*" (italics ours).

The second and third chapters are entitled "Inhibition and Will." They are concerned with experiments performed on the Marsh Tortoise (*Emys Europea*)—an animal whose central nervous system is unusually resistant to trauma.

If the brain of the animal is removed from the skull in such a way as to leave behind the medulla and cord, the animal exhibits a restless and incessant activity. If it is removed in such a way as to leave, *in situ*, in addition to the medulla, the optic lobes, the animal remains stuporous and inert. From this Professor Fano deduces that the optic lobes exercise an inhibitory influence on the centres below it. The function of the higher centres—the pallium and the corpus striatum—the author holds to be that of inhibiting the tonic inhibitions of the optic lobes, so as to admit of activities adapted to the requirements imposed by the animal's environment. These attenuations by the pallium of the tonic inhibitions of the mid-brain, are held to be "voluntary," and are accompanied by "the evoking of mnemonic images, which give to the will the appearance of proceeding according to a reasoned motive." The tonically exciting influence of the medulla is regarded as an example of an "unconscious" function. Professor Fano quotes other instances of "unconscious" behaviour from the animal and vegetable world. The unconscious functions are regarded as being in certain ways more efficient ("technically superior") than conscious functions, but at the same time as being separated by no essential difference from motives which give rise to conscious action. Both, in fact, are "the work of a special agent acting in a manner similar to the will." In this obscure phrase, allusion is seemingly made to the cosmic will, which formed the apotheosis of Chapter II.

The last two chapters deal with the subject of "excitability and automatism." Their purport is to demonstrate that an antagonism exists between these two functions. The materials upon which the author worked were the hearts of embryo chicks of different ages. During the first few days after fertilisation of the ovum the automatism of the embryo heart showed itself relatively resistant to disturbance by electrical and thermal stimuli; in the later stages of ontogenesis the heart became more irritable to such stimuli, and the automatism of the cardiac rhythm was more easily disturbed by them. Automatism characterises the "essential functions" such as those of the heart and the lungs. It also is a feature of the lower zoological types and of the early stages of embryonic development of the higher types. But in the higher types automatism is replaced by excitability, by which is meant "the capacity for answering readily and quickly to external and internal stimuli, even when very slight."

The superiority of man in the animal scale is therefore measureable in terms of his "dominion over himself and on the inhibition of those atavistic impulses, which too often reduce him to the level of the brute."

And from physiology, Professor Fano holds that not only a scientific, but also a moral, lesson may be learnt. From the collaboration of the tissues in defence of the whole organism, and in the subordination of the multitudinous activities of the different cells of the body to the interests of the body as a whole, he sees a pattern on which the behaviour of human beings should be modelled.

The book, which has been translated from the Italian, is presented to the reader in language which does not facilitate his task of reading. The text is also copiously interlarded with quotations from English, French and German—predominantly German—authors.

We are at a loss to imagine to what class of reader this book would be of interest. Its relevance to medicine is too distant to justify recommendation to the medical student. To the lay public of good literary digestion it might appeal as the work of a writer whose scientific eminence might give weight to his philosophical generalisations.

To the reviewer, however, it seems that the biological generalisation of the first two chapters is the product to the "mental temperament" (p. 32), of a person whose scientific achievements have not extinguished a desire for particularised religious belief. To quote Professor Fano's own words: "In truth he who does not know how to resign himself to a serene agnosticism on the causation of species would be able provisionally to satisfy this *need for dogma* (italics ours) by returning to the ancient conception of vital force."

Mental Diseases. Catechism Series. Author Unnamed. Pp. 78. Published by E. & S. Livingstone. *Price* 1*s.* 6*d.*

THIS little book maintains the standard of the series, which is primarily adapted to the student working for examinations. After a preliminary discussion of the nature of mental disease, in which insanity is defined in the apt phrase of Henry Maudsley and in which it is stated that no hard and fast line separates the neuroses from the psychoses—the criterion of insight is rejected as being frequently misleading—the author proceeds to consider the neuroses under the headings of neurasthenia, psychasthenia, hysteria, anxiety and compulsion neurosis. The psychoses are then considered at greater lengths, and are followed by questions upon the toxic and confusional insanities, general paralysis and epilepsy. Lastly, questions are asked with regard to mental

deficiency and to the legal aspects of mental disease. The book ends with a section devoted to treatment and mental hygiene.

The writing is clear and concise and, where possible, classification and tabulation are introduced. From these the student might be deceived into supposing that the various neuroses and psychoses are more clearly demarcated from each other than is actually the case. Thus dementia paranoides, paraphrenia and paranoia are names given to arbitrary states in a continuous series. Mental states rarely constitute distinctive clinical entities, such as are presented by organic diseases. In view of the extraordinary complexities of the human mind, and the vast range of human types, the fact that all sufferers from neuroses are capable of being pigeon-holed into five, and only five, categories does not speak highly for the acumen or penetration of experts in mental disease.

There is, however, one compensatory advantage of this remarkable limitation of medical knowledge and that is that the subject of mental disease is an exceedingly easy one for the medical student to satisfy the examiner upon.

For this unworthy purpose this book is entirely adequate.

What It Feels Like : Letters from a Doctor out East to a Colleague at Home. By "Doctor Robin." Published by the Student Christian Movement. *Price* 2*s. net.*

A REALLY delightful book of letters extending over a period of five years in a life of fascinating interest. Many have probably wondered at various times what being a medical missionary really feels like. This is a small book which throws a sidelight on to this question. For sheer humour, expressed in a thoroughly unconventional and yet obviously sincere style, these fourteen letters would be hard to equal. Add to this that the author is a doctor writing to a doctor and—particularly for a medical—here is a few hours really enjoyable reading.

The descriptions of a morning in Out-Patients in a Chinese hospital, some humorous incidents during famine relief work among the peasants, a "comic operation stunt" done for the amusement of the rest of the hospital, these make some of the best stories.

The book is by no means only humorous. It gives a very real idea of the problems which face a man who starts out on such an utterly new kind of life, and of how one man met them. And the backbone of it all is one of the greatest truths mankind has ever learnt—that if you want to do anything for anybody the only way is to be real friends with him.

The Treatment of the Acute Abdomen, Operative and Post Operative. By Zachary Cope. Published by Humphrey Milford, Oxford University Press. Pp. 232. *Price* 10*s.* 6*d.*

THE object—and, indeed, the attainment—of the book is stated by the author in his preface: "It is meant primarily to help those doctors who are not much practised in abdominal surgery, but who may be called in an emergency to operate upon an acute abdominal condition."

The book is divided into two sections, the first dealing with the operative treatment of the common surgical emergencies. In this section the chapters on perforated ulcers, acute intussusception and acute cholecystitis are particularly valuable.

The second section deals with after-treatment and contains chapters on such matters as the diet and care of the bowels, the treatment of unpleasant symptoms (hiccough, vomiting, flatulence, etc.), and post-operative shock; this latter being especially clear and convincing.

In the chapter on diet the author does not content himself with recommending such articles as peptonised and citrated milk, albumen water, barley water and so on, but includes instructions for their preparation.

The abundant diagrams illustrating all the stages of the operations described are particularly commendable. They are remarkable, among surgical diagrams, in that they show clearly what they are intended to show without clouding the main issue with a wealth of artistic and irrelevant detail. The text is in good type and the author has clearly conveyed his ideas and his subject.

It is rare for any two surgeons to agree on details of technique, and it is natural that there is room for criticism along these lines. We do not, however, propose to discuss these details, as we believe that "there are many paths to heaven," and the author would agree that his methods are neither unique nor infallible.

The whole book is a very complete work and devoid of useless detail.

We recommend it to those for whom it is written and also to all men working in the surgical wards whether as house surgeon, dresser or ward clerk.

Guy's Hospital Ladies' Association.

The Guy's Hospital Ladies' Association, with the permission of the Governors, propose to hold a Garden Fete in the grounds of the Hospital on Thursday, June 9th.

The Lady Mayoress, Lady Blades, has kindly consented to open the Fete.

Full details of Stalls, Amusements, etc., will be published later.

A Nursery Rhyme.

With apologies to A.P.H., in "Punch."

WHEN Ward Clerks bring the trolleys round,
And, slipping from their stations,
With downcast eyes, discreet and true,
The Nurses homeward bound.
Then, while we bind the patient up,
And quell the faint eruption,
I often to myself propound
This most enticing question:

What do the Nurses talk about, when Nurses come off Duty?
The talk, of course, is more refined
Than that which they have left behind.
Not there the humour that exhales
From bloodthirsty and exacting males,
But hose and cap and cloak and purse,
The price of bronze and copper.
This type of thing engrosses Nurse,
No doubt. But, still, do YOU believe
That's all the Nurses talk about, when Nurses come off Duty?

That fairy with the nut-brown locks,
Who struggled through the Op.,
What topic interests her now—
Not H.B.F.'s, I wot.
Those lips, that straight from slaught'ring Bo.'s,
Of whom she dare not utter,
Who knows, when she is with the Pros'.
What frightful things they mutter.

What do the Nurses talk about, when Nurses come off Duty?
While Chubby, o'er the patient blue,
Is turning all the entrails out,
His Nurses, with much less ado,
Are hurling instruments about!
Not wedding bells, but Spencer Wells,
Are exercising Sister,
And Care and Proper Training—yes,
And Ops., of course; but I can't guess
What else the Nurses talk about, when Nurses come off Duty?

Perchance it is about the firm
That did a round and tried to learn
About a man who's got a worm,
From Laver, Shaw or Doherty?
When work is done, away they go,
Perhaps to talk or else to show
The Registrars the way to—well—
A warmer place than I dare tell!

What do the Nurses talk about, when Nurses come off Duty?
First Lambs, then Pro and Strings and Staff,
We often hear their friendly chaff
Conveyed in tones that sound quite half
As loud as they are fruity.
At night the H.P., going rounds,
His heart and soul with love abounds.
Yet pauses still—how can he tell
His choicest hopes—he knows TOO well
What ALL the Nurses talk about, when Nurses come off Duty!

And oft, when we begin the task,
I note the rising blush,
And o'er the animated mask
Descends a stealthy hush.
Oh, why should Nurses fall so mute
If previous conversation
Has been concerned with silk and jute—
Or even fomentation?

What do the Nurses talk about, when Nurses come off Duty?
Though raucous jests ring out below
The Nurses' Home is nice, we know.
While Sister, sadly padding Splints,
Is giving Nurse SOME gentle hints,
Her H.S. tells, 'midst hideous yells,
Titbits concerning beauty.
And what I think is—What a shame!
And What a lot—But all the same,
What do the Nurses talk about, when Nurses come off Duty?

MERELY MALES.

Notice.

The Cossack's Dance.

A DANCE under the above name was held at the Bridge House Restaurant on Thursday, January 27th, in aid of Guy's, at which many of the Staff were present.

Many novel features, including a Charleston Competition and demonstrations of ball room dancing by Miss Gem Mouflet, of 429, Strand, W.C.2, marked the occasion as a signal success.

Following innumerable requests, it has been decided that another dance, under the same name, shall be held on Thursday, March 3rd. Applications for tickets, which are 12*s.* 6*d.*, double, inclusive, and the number of which is strictly limited, should be made without delay to any of the following: T. M. Calhaem, J. Fitzgerald, W. D. Larcombe, C. D. Malone, L. R. Rowlands or C. J. C. Siggers.

Anatomy at Burlington House.

CRITICAL opinions on objects of fine art have not much claim perhaps to the pages of a medical journal. But a note on the present exhibition of Flemish and Belgian pictures, at Burlington House, may offer something of anatomical interest to keep in mind.

Of the 764 exhibits, some 45 show the Holy Child, nude, or semi-draped. Now, there is one peculiarity about this Subject, as portrayed in Christian art, for wherever seen or by whomsoever done this Child of a Jewish mother and obedient to Hebrew law, is almost never depicted as bearing the evidence of circumcision. "Almost never," Are there any, then—is there even one exception—to be found at the present great assemblage at Burlington House? The answer—may be discovered by a visit there.

The pictures—canvas, panel, or tapestry—show about a dozen scenes of the Crucifixion or Descent from the Cross. All of these, save one, display the error that has been made by 99 out of every 100 artists who have attempted the scene. The mistake is that the spear mark of the Roman soldier is on the right side of the Crucified. In all probability the left side was pierced near to the heart, for the Romans were not as ignorant of certain physiological facts as was the 16th century A.D. We pointed out in these columns some while ago, in a review of Mr. M. H. Spielmann's work on Andre Vesale, that it was the great Belgian anatomist who discovered, for the modern world, the true position of the human heart, but painters were once strict Churchmen and neither careful nor willing to learn from what had been condemned as heretical. The old tradition of strength reposing specially in the right—right hand, for instance—is not yet dead. There are, perhaps, half-a-dozen examples of the Crucifixion, done by immortal hands, that show the piercing as on the left side, and of that small number just one, thus far correct, is now in the Royal Academy Galleries. Which number is it in the catalogue? Ah, that would be telling!

W. B. K.

Sport.

Rugby Fixtures.

Date	*Opponents*	*Ground*
Feb. 12	Devonport Services.....	Devonport
Feb. 15	St. Thomas's Hospital (*2nd Round, Inter-Hospital Cup*)	Richmond
Feb. 19	Plymouth Albion	Honor Oak Park
Feb. 26	Birkenhead Park	Honor Oak Park
Mar. 5	Rosslyn Park	Rosslyn Park
Mar. 30	Bristol	Bristol
April 9	Coventry	Coventry

United Hospitals Hare & Hounds.

U. H. H. & H. v. Thames H. & H. "A"

ON Saturday, January 22nd, when the Hospitals visited the Thames Hare and Hounds at Roehampton, we could only muster a weak team of four men. We heard afterwards, however, that another Guy's representative had tried to be present but, finding himself at Ranelagh instead of Roehampton, he had returned to the Hospital.

The 7-miles course, which led through Richmond Park and across Wimbledon Common, would ordinarily have been an ideal one, but on this particular day it lay under about two inches of snow and so running was not easy.

Of the Hospitals' team, Race and Forsyth ran well, but Walter and Way were somewhat out of training. Running 4 a side, the match resulted in a win for the Thames H. & H. by 12 points to 24.

The final order was:

1.	G. C. Faber (T.) - - -	43	35
2.	G. F. Peaker (T.) - - -	43	38
3.	D. Browne (T.) - - - -	43	39
4.	R. R. Race (Bart.'s) - - -	43	40
5.	P. A. Forsyth (St. Thomas's) -	44	35
6.	R. R. Verschoyle (T.) - - -	44	40
	G. F. Hyams (T.) - - -	45	4
	J. Souhami (T.) - - - -	46	44
7.	W. J. Walter (Bart.'s) - -	46	49
	J. Herrington (T.) - - -	48	8
8.	M. P. Way (Guy's) - - -	48	20

Thames Hare and Hounds "A"—1, 2, 3, 6—12 points.

United Hospitals—4, 5, 7, 8—24 points.

7-mile Handicap.

THE United Hospitals' Hare and Hounds held a 7 Miles' Handicap on Wednesday, February 2nd, at Hayes.

The course was covered by four inches of snow and in some places it lay even deeper; consequently the race was quite the most gruelling that we have had for a long time.

The feature of the race was the excellent running of J. S. Horsley who, starting from scratch, won in 46 mins. 14 secs, which, considering the conditions, was an extraordinarily good time. M. P. Way took the lead about a quarter of a mile from the start, and led for the first 5½ miles, when he was overtaken by Horsley on a particularly trying stretch of plough.

Calhaem, whose first run it was this season, ran well, and should be a useful addition to the Guy's team in the Inter-Hospitals' Cup.

R. G. Macbeth, the old Oxford Blue, slipped on a piece of ice about half way round and cut his knee badly, consequently he was severely handicapped. The trail was laid by H. G. McComas and R. H. G. Lay, but, as the paper was the same colour as the snow, it was not of much use.

It is hoped that as many Guy's men as possible will come down on Wednesdays to get into training for the Inter-Hospitals' Cup, the race for which will be run on March 9th.

The final order was as follows:

Place	Name	Hospital	Handicap	Handicap Time	Net Time	Place on Net Time
			mins.	m. s.	m. s.	
1	J. S. Horsley	London	Scratch	46 14	46 14	1
2	G. W. May	London	1	47 19	48 19	2
3	P. A. Forsyth	Thomas's	1	47 35½	48 35½	3
4	M. P. Way	Guy's	3	47 47	50 47	6
5	T. H. Calhaem	Guy's	3	48 42	51 42	7
6	R. R. Race	Bart.'s	1	49 15	50 15	4
7	— Somerset	King's	1	49 35	50 35	5
8	W. S. Pitt Payne	Guy's	3	50 27	53 27	9
9	— Sandiford	Thomas's	1	51 0	52 0	8
10	S. C. Brown	King's	3½	51 33	55 3	10
11	— Snowball	London	3½	54 38	58 8	11
	T. A. R. Callender	Guy's	3½	54 38	58 38	

Also ran—R. G. Macbeth (King's) and R. Ingham-Hyder (London).

Hockey.

Guy's v. Dover College.

THIS match was played at Dover on Wednesday, February 2nd, and resulted in a draw of 1 goal all. The score does not by any means represent the run of the game, as the Hospital were superior in every way till their forwards reached the circle, when their shooting was frequent but, unfortunately, very inaccurate.

The College scored their goal as the result of a free hit given against the Hospital left half. They followed up very quickly and shot before the Hospital backs were alive to the situation.

Curtis and Archer achieved several excellent runs, but without result, while Edmunds, who made a creditable first appearance for the 1st XI, also just missed scoring. The College nearly scored again towards the end of the first half, as our defence, including the goalkeeper, was somewhere near the mid-line, but the opposition forwards lacked determination and Corfe cleared in time.

In the second half the Hospital played a man short, as Howitt was injured, but they still managed to have the better of the exchanges. A good run and centre by Curtis was well put in by Edmunds, but the School goalkeeper saved—only not hard enough—and Archer was able to level the score (1–1).

The School backs played magnificently and the lowness of our score was undoubtedly due to their good marking and spoiling, but we should have scored more than one goal. The game was fast despite the heavy going and our defence, though at times somewhat wild, was good, while the whole team showed up well in the way of training.

Team—R. E. Smith; G. N. Carrell, F. N. Corfe; C. N. Howitt, J. E. Willett, R. A. Sykes; E. T. Conybeare, A. H. Curtis, C. A. W. Archer, G. T. Edmunds, H. O. Lyne.

Guy's 2nd. v. Wallington 2nd.

ON Saturday, January 29th, Guy's 2nd XI played Wallington 2nd XI, and won a fairly evenly contested game by 4 goals to 2, of which Edmunds scored 3 and Hill 1.

The heavy state of the ground was, without doubt, the reason why the finer points of the game did not receive their correct attention, but even so certain faults were too noticeable.

The forwards, and especially the wing forwards, were offside too often, as they did not pay sufficient

attention to the fact that opposing backs move up-field when the attack is in the opposite "twenty-five." Forwards should endeavour to remember that it is much better to pass early than to be tackled in possession of the ball. Combination tells every time, as individual efforts are generally fruitless.

The backs and halves were strong in defence, but frequently failed to get their forwards going, as they either tried to dribble and so enabled the opposition to get into place to intercept passes or else to hit haphazard down the field. If they will hit at once, instead of dribbling, and to a forward already on the move towards the enemy's goal line, they will find that the forwards will have much better chances of going through, as the defence will be left guessing.

Quickness on the ball—a feature too often absent in both 1st and 2nd XI's—was noticeably good, and with more attention to a few minor points the 2nd XI should prove a well-balanced team, with a good chance of success in the Inter-Hospital Competition.

Team—W. Wright, F. N. Corfe; H. S. Gare, P. S. Turner, K. E. Lane, W. S. Larcombe; A. Mayston, R. Hill, R. L. Duchesne, G. T. Edmunds, C. L. Stevens.

Fencing.

THE return match with the Instructors of the Lucas Tooth Training Club was held in the Gymnasium on Wednesday, February 2nd, 1927. Unfortunately, Major Garnier was unable to turn out for our opponents, so an arrangement was made so that their team of three should fight as a team of four. This complication proved too much for the scorer, but in spite of everything the system worked successfully.

In foil, Captain Pinkerton was unbeaten, only three hits being scored against him. C. H. Johnson showed a return of confidence in this weapon and lost only one fight. S. A. Scorer looked as if he was going to carry all before him, but his style savours rather of the sabre than the foil. E. L. Monkhouse was again apt to be excited, although in no way nervous. T. B. Pitts needs more control after his attack has been parried, and should phrase the bout correctly rather than rely on a remise.

In epée, Captain Pinkerton was again unbeaten. Gorer, Monkhouse, and Pitts each won two and Johnson one. The bouts were rather slap-dash and hurried, but this may have been due to the coldness of the Gymnasium.

In sabre, Captain Pinkerton again showed his best style, and was undefeated. F. S. C. Pritchard and J. F. Morris both played well, with the phrases fairly clearly defined. Scorer and Johnson only managed to win one fight each, both beating Smith.

Result

Foil	*Losses*	*Epee*	*Losses*
C. H. Johnson (capt.)	1	C. H. Johnson	3
E. L. Monkhouse	3	P. A. Gorer	2
S. A. Scorer	2	E. L. Monkhouse	2
T. B. Pitts	4	T. B. Pitts	2

Sabre	*Losses*
C. H. Johnson	3
S. A. Scorer	3
F. S. C. Pritchard	2
J. F. Morris	2

Lucas Tooth, 19 defeats; Guy's, 29 defeats.

This is a great improvement on the first match, and the team as a whole are to be congratulated, especially as Captain Pinkerton is an International fencer and J. Cassford is a staff sergeant instructor. The team will, however, never show very great or rapid improvement until lessons are taken more regularly and practice is indulged in more frequently.

Pavy Gymnasium.

THE Competitions for "Novices" in Boxing, Fencing and Gymnastics will be held in the Gymnasium as under:

Boxing (8 *Weights*), on Tuesday, February 22nd, 1927, at 4.45 p.m. Secretary, R. N. C. Smith. Referee, Alf Hewitt.

Fencing (*Foil only*), on Thursday, February 17th, 1927, at 4.45 p.m. Secretary, E. L. Monkhouse. Referee, the Fencing Team.

Gymnastics (*Horizontal and Parallel Bars and Vaulting Horse*) on Friday, March 4th, 1927, at 4.45 p.m. Secretary, R. F. Prichard. Judge, Geo. Baker, M.B.P.T.I.

Those members of the Clubs' Union who wish to enter for the various events—for which there are "pots"—are asked to give in their names to the secretaries or to the Captain of the Gymnasium, C. H. Johnson.

Note.—A "novice" is defined as one who has never represented the Hospital in the sport in which he is competing.

Appointment.

Lieut. H. P. Baylis, R.N.V.R., promoted to the rank of Lieut. Commander, R.N.V.R., as from November 4th, 1926.

Death.

LARKIN.—On January 13th, at his residence, Craven House, Grove Park, Frederick George Larkin, F.R.C.S., Eng., (honorary), in his 80th year.

EDS. { F. S. C. G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *February 26th, 1927.* *Number 1007*

PASSIM

THE new catering company has now been in action for a little over a fortnight, and shows much promise of being a success. We understand that the first week's turnover produced a substantial margin of profit, which is a distinctly healthy sign. It is as yet by far too soon to criticise, as it must necessarily take some time for the staff of the new company to learn all the unusual peculiarities of providing for a body of men who must take their meals when and how they can, and often in a very limited time. These peculiarities will not be apparent quickly to anyone without experience of Hospital life, nor is it easy to get to know the people likely to want, by reason of their duties, food within the shortest possible delay. Although the machinery has not yet been "run in," we think that there is every indication of the development of a smoothly working organisation.

It is a natural tendency to be impatient when the stomach is empty—Napoleon lost one of his most important battles as a result of a gastric disturbance—while many domestic calamities have had their origin in food. So it is perhaps futile to urge that men should be tolerant of delay between the order of food and its arrival and reserve their complaints for their representatives on the Catering Committee instead of expressing them malignantly at the moment, which seems to us the worst way of attempting to get an efficient service.

We understand that men taking lunch in the Spit are greatly benefitted by the new scheme, where a very sufficient and attractive supply of food can now be obtained for a shilling.

If everyone realises that this is his company, the profits of which benefit himself and not an external body desirous of living at his expense, and that there is a recognised channel by which his grievances can be vented, then the new company must surely be a success.

THE side gate, looking out on Great Maze Pond, is in the process of enlargement and reconstruction. The iron railings and gate previously continued in a straight line (about 10 yards outside the Memorial Arch) from the Surgical to the Medical blocks. The railings are now being curved in to the Arch, and the gate actually put across between two pillars of the Arch, thus widening very considerably the only entrance for vehicles to the Park.

It seems that the old gate would have rendered the entry of fire engines to the Park either an impossibility or at least an extremely difficult and prolonged business, and we breath a sigh of relief on realising that there is now little foundation for the mental picture of a blazing Nurses' Home, with the occupants of the College rescuing terror-stricken Nurses and endeavouring to extinguish the flames with Higginson's syringes, while a perspiring horde of firemen destroy the Warden's House to make room for the negotiation of modern fire engines into the Park.

WE offer our congratulations to Mr. B. L. Laver on his appointment as Surgeon to the Northampton Hospital.

Mr. D. W. NORTHFIELD has been elected President of the Residents, and Mr. D. Ettles Vice-President.

ELSEWHERE we publish in this number a list of the writings of present members of the Staff during the period 1924–25. This bibliography has been compiled by the Wills Librarian (Mr. G. A. R. Winston), and we feel sure will be of interest to both present and past Guy's men.

THE recent list of newly elected Fellows of the Royal Society includes the names of two Guy's men, which must be an unusual honour for any

Medical School. And we offer our warmest congratulations to Mr. P. P. Laidlaw and Mr. C. M. Wenyon, C.M.G., C.B.E., on attaining this distinction. Mr. Laidlaw is very well known to many of the present generation of Guy's men as a pathologist of outstanding ability. Mr. Wenyon has won renown as an authority on parasitology.

WE announce with regret that the Rev. A. G. Harris, Assistant Chaplain to the Hospital, is shortly leaving Guy's after filling the position for six years, to become Vicar of Plumstead.

Not least among his many attractive qualities that will be missed greatly is his sturdy effort at leading the hymns in the Wards at Evening Service. Realising in full, from personal experience, the difficulties of song—having once been expelled from "digs" at Honor Park for frequently attempted song before breakfast, our respect for Mr. Harris has often been stimulated by his vocal efforts.

ON another page we publish a letter deploring the inclusion of a Bridge Competition in the GAZETTE. We wonder whether this is a general as well as a particular opinion, and would like to point out that the Competition is an addition and not a substitution.

Medicine in Antiquity.

From a Lecture by Dr. C. Singer, Lecturer in the History of Medicine to the University of London.

SCIENTIFIC medicine began in Greece. The Greeks not only gave us the first start in medicine, but have also provided almost all our medical nomenclature, and very substantial basic elements of our anatomy, physiology and pathology. When to this we add that our clinical tradition is inherited through a direct and continuous chain from the Greek practitioners, it becomes evident that the debt that medicine owes to this marvellous people is great indeed.

Now, this debt has become associated with two or three great figures. All have heard of such names as Hippocrates, Galen and Herophilus, but it is not always recognised of what a widely extended and long-lasting system these men were the representatives. Greek medicine was by no means the product of a few great intellects, but was—like our own—the result of centuries of carefully recorded, collated and progressive research. Greek medicine first took on a scientific aspect with the Ionian and Italo-Greek philosophers at the very beginning of the sixth century B.C. and continued to make important advances until the death of Galen at the very end of the second century of the Christian era. It thus lasted eight hundred years. With the most tolerant use of the words "scientific" and "progressive," we can hardly place the beginnings of scientific and progressive medicine in Europe at a date earlier than the later part of the fifteenth century, so that our own system has only been developing its characteristic features for some four and a half centuries, but little more than half of the course that Greek science had to run.

It is evident, therefore, that we may still have a great deal to learn from the Greeks, not perhaps in matters of actual fact and observation—for all, or nearly all, that is *directly* useful in their works has been long absorbed into our medical literature—but in spirit and method. Above all, from a study of the character and course of Greek medical science we can gain a hint of the dangers and difficulties that may await the development of medical thought in our own times, and the snares and pitfalls and catastrophies into which our profession might be led.

It has been said that "save the blind forces of Nature, nothing lives or moves which is not Greek in origin." That phrase of a great jurist, Sir Henry Maine, needs a little modification, for there is a thing which still lives and moves that is not Greek in origin, a blind force which is not a blind force of Nature—it is the force of superstition. The Greeks were not free from it any more than we are in these days. But the greatest of them were utterly above such folly, and we can watch the Greek mind gradually lifting itself from that primeval mental attitude which is older than any known culture, perhaps older than any known race—the attitude of Nature worship, animism. To give an idea of how the "sweet reasonableness" of the Greek mind gradually dissipated these elements, a few words must be said about the history of the Greeks, because without that amount of history it would almost seem a miracle that man ever became reasonable at all.

The medicine we call Greek might really be described as the system which prevailed in ancient times in that half of the Mediterranean area which lies east of the Italian Peninsula. Up to about 1000 B.C. this area was inhabited, so far at all events as the coast lands were concerned, by that most remarkable people the Minoans. These have left some extraordinary remains, the full significance of which is not yet revealed to us, but the general development of their civilisation has been clearly outlined by the labours of Sir Arthur Evans. The exploration of the last twenty or thirty years has resulted in an entirely new interpretation of the story which Homer tells in the *Iliad*. The siege of Troy represents an attack by the invading Greeks on these Minoans in their last stronghold. About 1000 B.C. the whole of the Eastern Mediterranean basin was being overrun by the people who became known as Greeks coming in from the North. Even at that date the Greeks were no longer a pure race, but a mixed group of tribes who came along at least four lines of advance. As always happens in such invasions, the people they conquered were not exterminated, but mingled with the invaders, and the Greeks, as they moved southward and eastward, absorbed much of the culture and, no doubt, much of the intellectual outlook of the civilisation that they submerged.

So far as the history of medicine goes, we are concerned chiefly with two main invading streams —that of the Dorians, who passed towards Crete and towards the island of Cos and the opposite peninsula of Cnidus, and that of the Ionians, who colonised most of the remaining part of Western Asia Minor. These two peoples divided between them the intellectual output of the Greeks of these early days. The medical system which they initiated first took shape in Western Asia Minor, and thence diffused itself over the whole of the Greek world.

The Greek system of medicine which thus arose in Asia Minor had various roots, as, indeed, the medicine of a mixed people, living under very complex social conditions, was bound to have. Firstly, there was the culture of the conquered Minoan folk. It is probable that the cult of the serpent, which is constantly associated with the worship of Æsculapius, and at last became his symbol, was of Minoan origin, for the serpent was a very constant symbol of the Minoan religion. It is probable, too, that many of the hygienic ideas of the Greeks were derived from the same source, for the Minoans had certainly a good system of drainage, but we can say very little on this head because the interpretation of the Minoan script is still a secret hidden from us.

The Western shores of Asia Minor lie on the outskirts of the great civilisations which had grown up in the valleys of the Tigris and the Euphrates, and the Greeks drew from that source much of their more superstitious beliefs, as well as much of their scientific method. Thus, the demoniac theories that bulk so largely in later Greek medicine doubtless came from Assyria and Babylonia. The medicine of the New Testament with its casting out of devils and evil spirits is of Mesopotamian origin. But another and very important aspect of Greek medicine came from Assyria and Babylonia. The Mesopotamian peoples had for long ages laid up a great treasury of observation, chiefly, so far as our knowledge goes, of astronomical data. On the basis of these extensive records the Greeks were able to erect a scientific method which appears as a prominent feature in their intellectual life in the centuries which were to follow.

To the Egyptian civilisation the Greek debt was perhaps less, but a large part of the materia medica of the Greeks was undoubtedly derived from Egypt and, as some think, the basis of Greek medical ethics also. Many of the practical devices of Greek medicine, such as the forms of their surgical instruments, and no small number of their drugs, were of Egyptian origin. Nor can we afford to neglect the statement made by the Greeks themselves that their mathematical knowledge, which is the basis of all scientific work, was first derived from Egypt.

The advancing Greek peoples on the western shores of Asia Minor, thus deriving material from many sources, began to develop, towards the end of the seventh century B.C., a philosophical system, of which the whole character of their science and thought may be said to be a natural growth. Very important factors in this development were the medical schools of Cos, where Hippocrates was born, and of the opposite peninsula Cnidus. These schools were in active operation by the sixth century B.C., and by the middle and end of the fifth they were important elements in the growing complexity of Greek life. The actual *Hippocratic Collection*, which has survived, must have been put together somewhere in the fourth century B.C., but our present recension was made in Alexandria about 300 B.C., or a little later. It was in Alexandria that the greatest Greek medical school developed, and almost all the Greek medical writers, after the break-up of the empire of Alexander in 323 B.C., were trained there. It is a noteworthy fact in the history of medicine that Athens, the main centre of the Greek life and thought, plays quite a minor part in the history of medicine.

Curiously enough, although we inherit the finest scientific spirit from the Greeks, and although they

set us an example of the purest and most disinterested type of medical practice, they are also —in part, at least—responsible for some of the basest and most superstitious forms of medical jugglery that have afflicted, and still afflict, mankind. The medicine of the physicians was only one of the medical systems in vogue among them, there was also the medicine of the priests; and the temple jugglery of Greece is the ancestor, both by imitation and by direct tradition, of much of the miracle mongering of mediæval and modern medicine. Furthermore, in ancient as in modern times, all medical men were not equally pure and scientific in their methods, and there was certainly a relation between the practice of some of the physicians and that of some of the priests. The actual extent and nature of the relationship and even the question as to which of the two systems is the earlier, is still a subject of dispute among scholars and one which we shall not attempt to decide here. For our purposes it is enough to say that in their most typical development the two systems were quite distinct and we shall describe them as such, asking our readers to bear in mind that we assume this complete separation for simplicity and brevity. It is the lower form with which we shall deal first.

The Medicine of the Greek Priests

The temple system of Greek medicine was associated from an early date with a deity, Æsculapius. Very numerous representatives of this god have come down to us, and we see him gradually moulded to a particular type, one of the best representations of which is the fine head in the British Museum. He is usually represented as an aged man of very noble aspect, of somewhat dreamy countenance, holding in his hand a staff around which a serpent is twining. The cult of Æsculapius was carried on in a large number of sites distributed over a wide area of the Eastern Mediterranean. Of these the best known, both from literature and excavation, is that at Epidaurus. The conditions there may be taken as typical of those prevailing in other Æsculapian centres.

Epidaurus is about 30 miles south-west of Athens. It lies in a valley between two considerable ranges of hills and the country bears still, in its customs and place-names, some remnants of the ancient cult. The tradition we have of Æsculapius in connection with this site is largely derived from Pausanias, an old gossip of the second century of the Christian era, who wrote a guide book to Greece. The story Pausanias tells is that a certain maiden, Coronis, became with child by Apollo and she brought forth on the mountain Titthion. The event is still recorded in the name Koroni, a village in the valley hard by. She fled to conceal her shame and left the child on the mountain, where it was tended by a goat and watched over by a dog, which was looking after the flock. The goat and the dog being missed by the shepherd, he set out to look for them and found them with the child. He endeavoured to attract the goat and the dog from the child, who thereupon sent forth flames from his mouth and eyes and very soon, Pausanias tells us, this child Æsculapius was performing many other miracles all over the valley. And here, he says, in commemoration of these events, the temple to Æsculapius was built.

The story is further elaborated by Pausanias in another passage, which is of great interest to anthropologists. He relates that there was still in his day at Epidaurus "an old slab which tells that Hippolytus dedicated twenty horses to the god. The men of Aricia tell a tale that agrees with this. They say that Hippolytus was killed by the curses of his father Theseus and Æsculapius raised him from the dead. On coming to life again Hippolytus refused to forgive his father, rejected his prayers and went to Aricia in Italy. There he became a king and devoted a precinct to Artemis where, down to my time, the prize for the victor in single combat was the priesthood of the goddess. The contest was open to no freeman, but only to runaway slaves."

The runaway slave, seeking sanctuary with Artemis in her grove, was allowed his liberty and raised to the priesthood there, but retaining office only so long as he can guard it in mortal combat against the next runaway slave—this succession of priestly murders is a picture that has touched the imagination of the poets. The sacred grove of Artemis stood by the side of the lake Nemi:

"The still glassy lake that sleeps
Beneath Aricia's trees—
Those trees in whose dim shadow
The ghastly priest doth reign.
The priest who slew the slayer,
And shall himself be slain."

Macaulay.

It is a picture utterly out of accord with the general trend of classical mythology. Many years ago it drew the attention of Sir James Frazer. He perceived in it the remains of a submerged faith, the ancient Nature worship which survived among the Greeks and which still survives with us. With this incident as his text he wrote his immortal *Golden Bough*. By this story and by all that it implies and all that learning has drawn out of it and associated with it, the history of medicine comes into contact with the study of the lower culture, with anthropology. But that is a realm

that we must not enter further. It was a more developed and elaborated Nature worship that Pausanias had before him and that we have to discuss. In his time a great temple had arisen at Epidaurus, which has been excavated in our own days.

This temple, or rather temple enclosure, was a vast area, surrounded by a huge outer wall. Near the centre of the enclosed precinct stood the temple proper and around it a series of buildings for the accommodation of sufferers who came to be delivered from their various woes by the god Æsculapius. It was the custom of such people to make a prolonged stay at Epidaurus, where they took lodgings and waited their turn for treatment. But the course of treatment only lasted a day, or at most two days and then the patients came back to their hostel to watch their own particular diseases and think themselves better, or to await another turn. It was natural that these idle health seekers should require amusement and the general aspect of the Æsculapian sites must have been much like that of one of our modern watering places. A racecourse and a magnificent theatre have been uncovered at Epidaurus.

When a patient's turn for treatment had come, he had first to enter the Temple of Æsculapius, remarkable details of the ornamentations and furniture of which have survived, so that a very complete restoration can be made of it. The commanding feature of the temple was an enormous and very impressive statue of the god placed at one end of the building. He was seated on a throne, holding a staff in his right hand, while at his feet crouched a dog and a serpent. The achievements of Bellerophon and Perseus were represented on the pedestal of his statue and before him stood the altar. The statue was made of ivory and gold, a combination of materials which appealed peculiarly to the Greeks. Such chryselephantine statues were liable to develop cracks, the ivory tending to shrink away from the gold, and to prevent this they were kept constantly oiled and a whole service of priests was necessary to maintain a suitable surface. Before this statue the sufferer poured out his libation, made his prayer and—a very important part of the treatment—paid his fee.

Having performed these important ceremonies he passed on to another building in the enclosure, the so-called "Tholos" or Round House, a building which, again, can be restored with considerable confidence. We are somewhat in the dark as to what happened here, though it is believed that a fee came in somewhere. The Tholos had a very complicated basement and some think that the sacred serpents were kept there and took part in some ceremony. Others consider that a spring used in ritual ablution was situated here. A more general opinion, which is probably correct, regards it as the elaborated remains of a sacrificial pit. At a time long anterior to that with which we are now dealing, slaughtered animals were flung into a sacrificial pit in such temples, a coarse business that ill accorded with the refinement of the period when the finest of these Epidaurian buildings were erected. The whole structure and the ceremonies associated with such temples were gradually remodelled and, instead of throwing bodies, bones or blood into the pit, some small present was cast therein. Having performed this ceremony and passing from the Round House, which was one of the most beautiful buildings in ancient Greece, the patient took a parade on the terrace and passed into the "Abaton," or Portico, where the main part of the treatment took place.

The Abaton was a long ward, open towards the south and divided into two parts by a wall, one section being reserved for women and the other for men. In the neighbourhood of the Abaton or Portico was a spring, where the patient on arrival washed himself and prepared for the night. We can form some idea of the interior of the Portico from the description of several writers. There were two rows of beds and there were small altars, where wine and meat offerings were made. Among the beds and around the altars many privileged wandered about—serpents, geese and dogs. It seems to be a fact that these animals, especially the serpents, were trained to lick the wounds of the patients. It may be thought that snakes would be too intractable to train, but there are so many accounts making this statement that we can hardly reject them all. The serpents were, of course, a harmless variety.

Having performed prayer and offered libation, the patient turned into his assigned bed and sought slumber. Once asleep he almost infallibly saw a vision, for the whole tendency of the treatment was to produce this effect and the central item in the dream was naturally the dream god Æsculapius. With the features of Æsculapius before us we may profitably consider the visions which these patients saw, for we have a record from words taken down, or alleged to be taken down, from their own lips. It was the custom when they had found relief from their diseases by the bounty of the god, to record their recovery on tablets. Some of these have survived, but more informing are edificatory inscriptions put up by the priests at Epidaurus giving an account of the cures which are said to have taken place there. Two or three of these will give a better idea of the nature of the temple practice than pages of descriptions.

" Kleo was with child for five years. After these five years of pregnancy she came as a suppliant to the god and slept in the Abaton. As soon as she left it and got outside the temple precincts she bore a son who, immediately after birth, washed himself at the fountain and walked about with his mother. In return for this favour she inscribed on her offering : ' Admire not the greatness of the tablet, but the divine power, in that Kleo was with child for five years, until she slept in the Temple and the god cured her.'

" A dumb boy came as a suppliant to the Temple to recover his voice. When he had performed the preliminary sacrifices and fulfilled the usual rites, the temple priest who bore the sacrificial fire turned to the boy's father and said : ' Do you promise to pay within a year the fees for the cure if you obtain that for which you have come ? ' Suddenly the boy answered, ' I do.' His father was greatly astonished at this, and told his son to speak again. The boy repeated the words and so was cured.

" Pandaros, a Thessalian, who had marks on his forehead. He saw a vision as he slept. He thought that the god bound the marks round with a head-band and enjoined him to remove the band when he left the sacred hall and dedicate it as an offering to the Temple. When day came he awoke and took off the band. His face had been cleansed of the marks and he dedicated to the Temple the band to which the marks were transferred from his forehead.

" Echedoros received the marks of Pandoras in addition to those which he already had. He had received money from Pandaros to offer to the god at Epidaurus in his name, but he failed to deliver it. In his sleep he saw a vision. He thought the god appeared to him and asked if he had received any money from Pandaros to place as an offering in the Temple. He answered that he had received no such thing from him, but if he were healed he was willing to offer to the god an image with an inscription. Thereupon the god fastened the head-band of Pandaros round his marks and bade him take off the band when he left the Abaton and wash his face in the fountain, looking at himself in the water. When day came he left the Abaton, took off the head-band, on which the marks were no longer visible, and saw his face with his own marks and those of Pandaros in addition.

" A man of Torone who had swallowed leeches. In his sleep he saw a vision. He thought that the god cut open his chest with a knife and took out the leeches, which he gave him into his hands. Then he stitched up his chest again. At daybreak he departed cured, with the leeches in his hand. By his stepmother's treachery, he had swallowed them while drinking a mixture of honey and wine into which she had put them.

" Aristagora of Troizen. She had tape-worm and while she slept in the Temple of Æsculapius at Troizen she saw a vision. She thought that, as the god was not present, but away in Epidaurus, his sons cut off her head, but were unable to put it back again. Then they sent a messenger to Æsculapius asking him to come to Troizen. Meanwhile, day had come and the priest actually saw her head cut off from her body.

" The next night Aristagora had a dream. She thought the god came from Epidaurus and fastened her head on to her neck. Then he cut open her belly and stitched it up again. So she was cured.

" Gorgias of Herakleion and suppuration. He had received an arrow wound in the lung during battle, and for a year and a half discharged so great a quantity of matter as to fill 67 dishes. In sleep he saw a vision. He thought the god extracted the arrow point from his lung. Then day came and he departed, holding the point of the arrow in his hand."

These inscriptions, and others like them, tell us of the kind of practices which constituted the temple medicine among the Greeks. But we have other sources. Many of the patients themselves put up tablets of another type—they placed before the god an image of the part affected. Sometimes the images were of gold or silver, sometimes of clay. But, by an extraordinary coincidence, the gold and silver images have all disappeared and only the clay ones have come down to us ! A man with trouble in his abdomen would put up a model of his intestine, a man with a pain in his hand would dedicate a hand, another with some leg disability would place a leg in the temple. An exactly similar process, with exactly similar models goes on to this day in the churches of many parts of Europe. Often we find half a head, the division being sagittal, and such half heads must have been placed there by people who suffered from hemicrania. A childless woman naturally placed an image of the womb and a very large number of these have been found in various sites, especially in Rome, where there was a special goddess of childbirth. Models of thoracic organs are common. Occasionally we see the actual disease portrayed in such a votive offering—for instance, in one famous bas-relief a patient is seen in the act of making his offering, which consists of a large model of a leg affected with varicose veins, the enlarged tortuous internal saphenous being clearly evident. On other occasions the patients placed in the temple images of the god, frequently accompanied by some of his attendants, or members of his family, such as his daughter Hygeia, who usually, like her father, carried a snake. A large number of these have survived.

A common votive offering is a model of the little god of convalescence, Telesphorus, with a cape like a monk's cowl over the head. The Roman legions in Britain carried with them doctors trained in Greek medicine and, at the extreme limit of the Roman Empire close to Hadrian's Wall, a model of Telesphorus was found. Nor is it the only specimen of Æsculapian worship found in these islands. At Chester-le-Street, in Northumberland, there was an Æsculapian cult and a statue of the god has been excavated there.

The medical practice of the temples with all its ridiculous accompaniments could hardly escape derision by the more rational of the Greeks, and we have records from several sources of the way the more sceptical of them regarded it. Even the picture given by the inscriptions does not give its worst side for, as the Greek culture degenerated, the Æsculapian temples became centres for idle and malicious gossip, and, finally, were little better than brothels. But, without degenerating to that extent, they were subjected by the comedians to much the same type of humour that Homburg or Bath is in our own day. A passage from the comic poet Aristophanes shows how he regarded these things. It is from his *Comedy of Plutus*, and it is a dialogue between a man and a woman, who are discussing events in an Æsculapian temple:

"*Karion:* As soon as we approached the god with him who then was the most miserable of men, but now blessed and happy above all, first we took him to the water and then gave him a bath.

Wife of Chremylos: Truly, he was fortunate—an old man bathed in the chilly water.

Karion: Then we went to the precinct of the god. When our wafers were laid on the altar, the preparatory sacrifices made and our cake in the flame of Hephæstus, we laid Plutus down on a couch, as was right, and we all put straight our mattresses.

Wife of Chremylos: Were many other seeking the aid of the god?

Karion: Yes, one Neokleides, who is blind, but surpasses in stealing men who can see, and many other suffering from all sorts of diseases.

When the servant of the god put out the lamps and told us to go to sleep and keep silent if we heard a noise, all of us lay down quietly. I was unable to sleep, for I was distracted by a pot of porridge which stood a little way off from the head of an old woman and I longed to creep up to it. Then, looking up, I saw the priest carrying off the cake and figs from the sacred table. Thereafter he went round all the altars in turn to see if any cake was left behind. Then he consecrated them into a bag. I, thinking there was great piety in the proceeding, got up and went for the pot of porridge.

Wife of Chremylos: Didst thou not fear the god, audacious man?

Karion: Ay, indeed, I feared him, lest he should get to the porridge pot before me, with his chaplets. His priest it was who showed us how.

Then Karion describes how the god appeared with his daughters, Iaso and Panacea.

Karion: Straightway I covered myself for fear and he went round examining carefully the ailments in turn. Then a boy brought him a stone mortar and pestle and a medicine chest.

Wife of Chremylos: Of stone?

Karion: No, not the chest.

Wife of Chremylos: But how didst thou see, thou wretch? Thou sayest thou wast covered up.

Karion: Through my cloak, which had, in truth, not a few holes. First of all he began to pound the ointment for Neokleides, putting in three heads of Tenian garlic. Then he crushed them in the mortar and mixed them with fig juice and squills. Then he sprinkled on Sphettian vinegar and anointed his eyelids, turning them up so that the pain was greater. Neokleides, screaming and crying, tried to rush away, but the god laughed and said: 'There, now, sit plastered over, so that I may keep you from going and perjuring yourself at the Assembly.'

Wife of Chremylos: How patrotic the god is, and how clever!

Karion: Thereafter he sat down by Plutus and first touched his head, then took a clean towel and wiped his eyelids. Panacea wrapped his head and all his face in a purple cloth. Then the god whistled and two serpents of prodigious size rushed out from the Temple.

Wife of Chremylos: O, ye friendly gods!

Karion: And these two crept gently under the purple cloth and licked his eyelids round about, it seemed to me. And before you could drink ten measures of wine, lady, Plutus stood up a seeing man.

I clapped my hands for joy and wakened my master. The god at once disappeared and the snakes with him into the Temple.

Those who were lying near Plutus began to congratulate him, you may imagine, and they kept awake the whole night till day dawned.

And I praised the god very highly that he had speedily made Plutus to see and Neokleides more blind than ever."

(To be Continued)

The House-Surgeon's Dilemma.

By our Dramatic Correspondent.

"THE Matron, the Sisters and the Staff are to blame for this. They have been so unusually—and so unnecessarily—well behaved during the last twelve months that they have afforded little material on which to build a Resident's play. As a result, I have had to rely on my own imagination." So apologised Mr. H. J. Selby, but he need not have done, for he relied on his imagination to such good purpose that he produced an entirely successful—if somewhat lengthy—"five dose" drama, which entertained crowded houses for four successive nights. It seems a little churlish to be critical of an effort which cost so much labour and provided so much music and laughter, but we are compelled to admit that the production would not have lost anything essential by a considerable reduction in the quantity of the "pre-anæsthetic." It is whispered in Clubs' Union circles that we are treading on dangerous ground in suggesting this, but the fact remains on literary and artistic grounds that the dream could have been suggested by a curtain raiser, which would have dispensed with the lengthy discussion of the relative value of old and young men in this competitive after-the-war world.

The play proper opened with a scene in the College Dining Room at breakfast time on a Sunday morning—*i.e.*, of course, any old time from 10 a.m. onwards! We do not recollect the introduction of this room into a Residents' play before, at any rate in recent years, and the idea was certainly a good one. The situation disclosed was that Agar Agar, a House Surgeon, was enjoying the society of dust, cobwebs and a fractured femur on the roof of the Medical building and—"What are we going to do about it?" The solution decided upon is to admit Agar, disguised as a patient, and to instal his farmer brother, Petrol, (who happens to be staying with him in the College) as temporary House Surgeon in his place. The feature of the scene was the acting of the waitress, Alopecia (E. J. Greenwood), who has conceived an enormous interest in medical matters and clinches her observations on putrefaction, bacilli, etc., with the following song:—

ACT I

The New Health Charleston.

Alopecia:

Everybody's Charlestoning—
It's quite the latest craze.
It's captured the young and old.
I expect you've learnt it
In quite a dozen ways.
For all the dancing masters
Are raking in the gold.
But I've got some news for you:
You're dancing it all wrong.
That's why I'm singing this song.
Don't delay,
Learn to-day,
The New Health Society way.

Chorus:

Don't Charleston with your feet or your head,
But do it with your tummy instead.
First thing every morning,
Last thing every night,
After lunch and dinner
It's the thing to put you right.
That's the real Charleston to do.
Make all your friends learn it too.
Perhaps they've got measles,
Or perhaps they've had a fall;
Perhaps they've got lumbago,
Still you've got to tell them all—
Medical, Surgical,
Gynæcological—
To roll the abdominal wall.

Once I dreamt that everybody
On the Staff at Guy's
Was learning this new exercise—
Surgeons and Physicians,
Specialists galore,
Dentists and Cosnultants, too,
Were pouring through the door.
Mister Eason drilled them,
And he looked so picturesque;
He stood on top of his desk
And cried with glee—
"One, two, three;
Taking your time from me."

Chorus:

Don't Charleston with your feet or your head,
But do it with your tummy instead.
First thing every morning,
Last thing every night,
After lunch and dinner
It's the thing to put you right.
That's the real Charleston to do;
Make all your friends learn it too.
Perhaps they've got Hodgkin's,
Or perhaps they've had a fall;
Perhaps they've got pneumonia,
Still you've got to tell them all—
Medical, Surgical,
Hypochondriacal—
To roll the abdominal wall.

Now I hear Sir Bluffnot says
That every Nurse at Guy's
Must master this new exercise.
Matron's going to drill them;
She's having lessons now,
So, if you want to learn it,
Just go and ask her how.
The Governors have chosen
An instructor for the Lambs.
I've just heard who headed the poll.
Haven't you
Heard it too?
Why, the Padre's been given control.

Chorus :

Don't Charleston with your feet or your head,
But do it with your tummy instead.
First thing every morning,
Last thing every night,
Aftet lunch and dinner
It's the thing to put you right.
That's the real Charleston to do ;
Make all your friends learn it too.
Perhaps they've got typhoid
Or perahps they've had a fall ;
Perhaps they've got bronchitis,
Still, you've got to tell them all—
Medical, Surgical,
Dermatological—
To roll the abdominal wall.

Dose II displays the plot in operation. Agar Agar (A. C. Copley) is No. 5 in Desperandum Ward, entered as " Chris Tolax." He explains to the Ward Clerk the medical knowledge which he cannot keep out of his conversation by the fact that he was a printer's assistant before he became a passage duster at Guy's. The Junior Pro., Lena Lipoma (G. H. Pitt) arrives, and begins to take a more than professional interest in him, until her attentions are cut short by Strings, Emolia Koleet (A. Simpson-Smith). Petrol Agar enters to do his round, and is successively told off by Sister Desperandum (D. W. C. Northfield) and his seriously alarmed brother in No. 5. However, he has no qualms about his own qualifications, especially as he knows now how to deal with every sort of case :—

ACT II

The Disposal Board.

Tune - - - - Valencia

Petrol Agar]

Rosacea : Send them round to Barber, who will call it some amazing name

Dementia : Symonds likes them. Diagnosing " Nerves" to him is just a game.

Otalgia : Send them up to Molly who will take the wax out of their ears.

Asphyxia : The O.P.O.'s been waiting for a trachy for at least two years.

When you can't determine what in the world to do,
Just ask Mayhew, he'll give you the clue.
Cameron sees the babies, who squeal like Hades ;
He's not very fond of the mothers—quite often, decidedly not.

Eclampsia : Send them round to Chapple or to Cook, who'll take them into Vic.

Gastralgia : Send them up to Poulton, who will pass a tube and make them sick.

Dysphagia : Send them up to Frankie who will cut pieces of their neck.

Pyrexia : Marshall's itching to detect a role or some suspicious speck.

Asthenia : Send them round to Iredell or to Carter-Braine to get some sun.

Neuralgia : Send them to the Dentist who will take their teeth out one by one.

Cachexia : Try and pass them off on anyone that you can find about.

Diplopia : If it's alcoholic, make the dresser wash the beggar out.

Photo by S. A. Walker.

If you've any cases of interest to no one at all,
The O.P.O.'s are down at the end of the Hall.
And, of course, there is Tubby and Roddy; and Lambrinudi,
There's Lindsey and Redding and Dowling; Herbert, Hurst and Hughes.

Dyspepsia : Ryle's the man to free their tummies of the pain, however bad.
Hysteria : Try Gillespie, though he much prefers them when they're really mad.
Aphasia : St. John Rumsay teaches them to talk and perhaps to dance as well.
Malaria : Stokes will microscope the blood and count the trouble in each cell.

Encore Verse

Diphtheria : Every twentieth you certify may perhaps bring in a bob.
Pyœmia : The Take-In A.H.S. will open up the boil and take a swab.
Ataxia : Send them round to massage, p'haps they'll teach them how to do a dance.
Bilharzia : If you think you've got a case, then I'll assure you it's romance.

If you've any cases whose legs don't seem to fit,
Take them to Trethowan; get him to see to it.
He'll pull them and push them and bend them, flex and extend them.
He'll rend them and mend and befriend them and sing you a song as well.

Myopia : Send them up to Eason, though, of course, they may not find him there.
Uræmia : The Clinical will take them and sit up all night; he doesn't care.
Bacteria : Eyre will find them in the skin or in the blood or anywhere.
Anœmia : If it's Addison's, of course that's absolutely Hurst's affair.

Mr. Crowlands (T. Evans-Jones) now arrives with his firm, and we are treated to one of the best things in the play in the shape of a demonstration by the Surgeon with the help of his handkerchief and waistcoat. The account of the diseases and their treatment, which Mr. Crowlands culls from his extensive practice, was well written, and acted with a naturalness and conviction which delighted us extremely, the whole episode being suitably concluded with the following song :—

The Eminent Surgeon from Wales.

Mr. Crowlands

My name's Bobby Crowlands,
You may think I'm Rowlands;
There is some resemblance, I know,
And I venture to say
I've perfected to-day
All the methods he used long ago.
Though we're different in name,
We've both risen to fame;
An account of our work never stales.
In fact, I may say
The world knows us to-day
As the Eminent Surgeons from Wales.

Chorus : Though different in the name
They've both risen to fame,
An account of their work never stales.
In fact, we may say
The world knows them to-day
As the Eminent Surgeons from Wales.

On two days in the week
You have not far to seek
If my work you are anxious to see.
And I never mind what
My House Surgeon has got,
For I always get finished by tea.
Or, if it's the morning
I choose to perform in,
To get to his lunch no one fails.
For I doubt if you've met
Any speedier yet
Than the Eminent Surgeon from Wales.

Chorus : Or if it's the morning
He comes to perform in
To get to his lunch no one fails.
And we doubt if you've met
Any speedier yet
Than the Eminent Surgeon from Wales.

With a grid-iron incision
I state with decision
I'll do anything that you say.
For with it one views
Any organ you choose
If only you know the right way.
When the Liver I've seen,
I examine the spleen,
To remove it no trouble entails;
No adhesions or bands
Ever hinders the hands
Of the Eminent Surgeon from Wales.

Chorus : When the Liver he's seen,
He examines the spleen,
To remove it no trouble entails;
No adhesions or bands
Ever hinders the hands
Of the Eminent Surgeon from Wales.

I remember one case
We took into this place
On a Sunday as thin as a rake.
On Monday I cut
Out a foot of his gut
And on Tuesday he clamoured for steak.
He went out next day
In the usual way,
And I hear that he no longer ails;
He is no longer ill
And it's due to the skill
Of the Eminent Surgeon from Wales.

Chorus : He went out next day
In the usual way,
And we hear that he no longer ails;
He is no longer ill
And it's due to the skill
Of the Eminent Surgeon from Wales.

Though my colleagues at Guy's
Are remarkably wise,
Yet I know there are others elsewhere,
Who can't make up their mind
On the lumps that they find

Photo by S. A. Walker

And I grieve for those under their care.
If you've any doubt,
Then I say "Cut it out,"
For I find such a plan never fails;
If you should get more pain
You can come back again
To the Eminent Surgeon from Wales.

Chorus: If you've any doubt,
Then he says, "Cut it out,"
For he finds such a plan never fails;
If you should get more pain,
You can come back again
To the Eminent Surgeon from Wales.

On Tuesdays, you know,
I invariably go
With my Firm on a round of each Ward.
The patients I cheer
For I say "Persevere,"
I will cut out some more, if you're bored.
I tell stories galore,
Though I've told them before,
Yet I think they are very good tales;
And by bed or by cot
You can learn quite a lot
From the Eminent Surgeon from Wales.

Chorus: He tells stories galore,
Though we've heard them before,
Yet he thinks they are very good tales;
And by bed or by cot
You can learn quite a lot
From the Eminent Surgeon from Wales.

There are countless Physicians
And famous Clinicians
Who my diagnosis request.
I have a quick feel
And my fingers reveal
Any trouble in tummy or chest.
No tumour 's so small,
No abdominal wall
Is so fat that my hand ever fails
The lump to detect,
And fresh fame to collect
For the Eminent Surgeon from Wales.

Chorus: No tumour's so small,
No abdominal wall
Is so fat that his hand ever fails
The lump to detect,
And fresh fame to collect
For the Eminent Surgeon from Wales.

When a kidney I slice,
I'm as cold as an ice.
But during the hours in between
I cannot keep cool
As I do on the stool
Up in Theatres at work on a spleen.
That's the why and the wherefor
My head's always bare, for
No hat I expose to the gales.
It resides in my car
And it travels afar
With the Eminent Surgeon from Wales.

Chorus: That's the why and the wherefor
His head's always bare, for
No hat is exposed to the gales.
It resides in the car
And it travels afar
With the Eminent Surgeon from Wales.

The Third Dose was a particularly delightful one. The scene was laid in the Park, where allotments now appear to be cultivated by Nurses who, as everybody knows, have been dying of *ennui* in their off duty time. The Horticultural Song (in which Mr. Greenwood again distinguished himself) explained all this :—

ACT III

A Horticultural Quartette.

Koleet :
They've turned all the Park into gardens to-day,
So that's why you see us at work in this way.
Carminativa :
The reason we're gardening, no one can tell,
But Matron has told us to "go and do well."
Mistalba :
We hoe up the soil, and we sow and we mow,
And show Scarlet Runners the way they should go.
Colocynthia :
The dear little sparrows eat up all our seeds ;
I think someone's put them on half-hourly feeds.

Koleet :
We work in our gardens two hours every day,
Destroying the earwigs with carbolic spray.
Carminativa :
Encouraging turnips their size to extend
And hoping the Super will come and commend.
Mistalba :
We plant the potato, the cabbage and bean,
Though I'm bound to admit that our harvest is lean.
Colocynthia :
I'd not be surprised if on some future day,
They make us a scene in the Residents' Play.

Koleet :
Our carrots are rotten, our seakale's infirm,
But you should have seen Wilfred, our sweet little worm.
Carminativa :
He lived over there in the cucumber frame ;
We fed him on Kruschen's, and got him quite tame.
Mistalba :
One day Mister Parsons, who's getting quite plump,
Tripped over the wire and fell down with a thump.
Colocynthia :
The ground shook so much that poor Wilf got concussed—
We found at P.M. that his backbone was bust.

Koleet .
The Surgical Registrars come once a week
To inspect the tomato, the swede and the leek.
Carminativa :
I think Mr. Eckhoff is simply divine ;
When he wears his Plus Fours, how I wish he was mine !
Mistalba :
And then, of course, there's Mister Doherty, too ;
What he said to me, though, I couldn't tell you.
Colocynthia :
I gave Mister Laver some mustard and cress—
He's mustard enough without mine, though I guess.

Koleet :
In Theatres one day the pillow went pop,
And Down's could not find us a spare in the shop ;
Carminativa :
So I to my garden immediately sped
And utilised one of my marrows instead.
Mistalba :
The Dean gave a prize for the finest display ;
The Matron came down here and judged us one day.
Colocynthia :
I thought I should win, but she said with a frown :
"You've planted your onions and sprouts upside down ! "

Koleet :
When the Medical Registrars come, we lay mats
To keep the mud off Mister Shaw's lovely spats.
Carminativa :
I love Mister Hern, who's a cynic, they say ;
I can't believe that, for he's always so gay.
Mistalba :
Of dear Mister Millis I dream in my sleep ;
He doesn't say much—but still waters run deep.
Colocynthia :
I found Mister Boland in tears Monday week,
But 'twas not love for me—he was chewing a leek.

Koleet :
We asked Mister Osman to teach us to dig ;
We thought he could do it ; he looks nice and big.
Carminativa :
I think our suggestion was perfectly sane,
But he's never been down here to see us again.
Mistalba :
So we asked Bobby Cann if he'd do it instead ;
"I'm afraid that I can't, I'm too busy," he said.
Colocynthia :
It takes all his time (bless his dear little soul)
To keep Mister Layton in proper control.

Koleet :
We had a pet beetle quite two inches long ;
We've a reason for mentioning him in this song.
Carminativa :
Some Americans came here one day to look round,
And jeered at the size of the things that they found.
Mistalba :
The Wards were all tiny, the theatres minute,
But we won the day and they ended up mute.
Colocynthia :
We showed them our beetle ; they murmured "Oh, gee !
What's that ? We replied, "That's a young English flea ! " .

Exhausted with their musical efforts the four nurses produce deck chairs and needlework. Mr. Waterfield's knitting was much admired by those who did not realise he possessed this among his many other non-medical parlour tricks. His voice as a "female impersonator" was deliciously and effusively feminine. Further comic relief was supplied by Lancelot and Montague, who, with such names, were, needless to say, Dispensary boys. They entertained us in many ways, and not least by the *Monumental Ditty*, suggested by the erection of statues of bygone worthies in the Park. A new and original solution this of the perennial problem of the introduction of the entire Staff into a Residents' play.

ACT III

A Monumental Ditty.

Lancelot :
They're filling up London with statues, they say.
Do you think they will put any here ?
Montague :
What, here in the Park ? No, I don't believe that.
By Jove, though, that *is* an idea.
Now let's both pretend that they've started the game,
And rows of them here we can see.
Lancelot :
Righto, then, here goes. Say, now, what do you think
Of that monument under the tree ?

Montague :
That one by the tree ? It's to Johnston, I'm told,
Anatomist, golfer and Dean.
He lived with a man who taught chemistry here.
Lancelot :
Oh, Gibson's the chap that you mean.
Montague :
They once had a row. The Dean murdered his mate
And dissected him on the Q.T.
Lancelot :
He pickled the brain and then labelled the jar
C6 H2O. R.I.P.

Montague :
Is McNair Scotch or Irish ?
Lancelot :
I really can't say.
He ought to be one of the two.
He always wears trousers—as far as I know,
So perhaps he is English, like you.

Montague :
Well, that one over there—it's the third from the right—
It looks like a skirt on two stilts ;
They put that one up to remember the day,
When McNair did a round dressed in kilts.

Lancelot :
Do you see that one there, just alongside those trees ?
There's Slesinger's name at the base.
Montague :
Oh, was he the bloke who at Out-Patients here
Was always distinguished for pace ?
Lancelot :
Yes, he finished at 12 and on some days 11.
But one day he came to preside.
His schemes went all wrong, and he finished at 6 ;
They say he went straight home and died.

Montague :
Now, just look on the left, at the end of the Park.
D'you see that great statue in brass ?
Lancelot :
Why, that's Mister Bromley—my father knew him
In the days when the Park was all grass.
No surgeon wore clothes with so perfect a fit.
But why was that monument made ?
Montague :
'Cause he came down one day with his waistcoat in folds
And trouser knees baggy and frayed.

Montague :
That one on the right is to Ogilvie's fame.
If he any cavity found,
He'd pour in some salt quite opaque to X-Rays
Which cost a small fortune per pound.

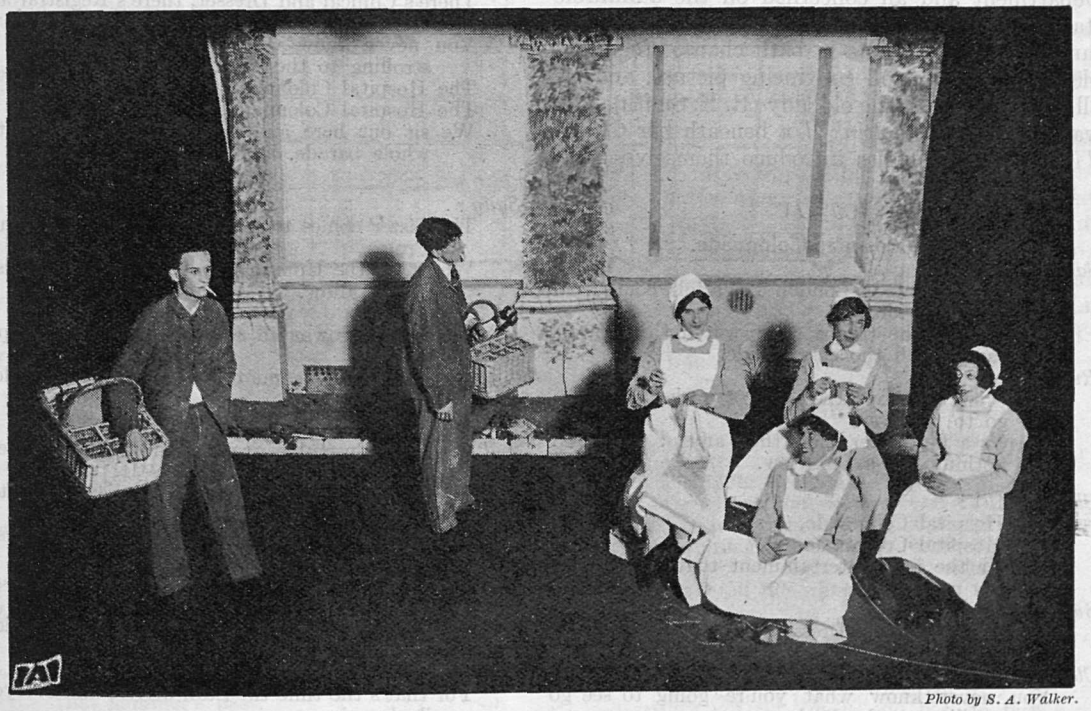


Photo by S. A. Walker.

Lancelot :
Yes, he once found a boy with a hole in his lung ;
He began to fill up the poor kid,
When the telephone rang. 'Twas the Super who cried :
"Hi, stop ! You've spent two hundred quid.'

Lancelot :
That little one there's to a fellow named Eyre,
The Professor of microbes, you know.
Montague :
He never was big and he slowly grew less,
Though it made him quite cross to be so.
Lancelot :
One day he fell into a tube full of broth,
He slid to the bottom entire.
Montague :
But when Cann shut the door of the Inc-u-bat-or
They say that Eyre's ire rose still 'igher.

Lancelot :
Doctor French is the name on that one on the left.
Montague :
What ? The one that is plated with gold ?
Lancelot :
Yes, the one with the railings of diamond around.
He was one of the Staff here of old.
The King's House Physician they made him at last.
That's inscribed at the top of the thing.
Montague :
Oh, well, that explains those four words at the base.
Lancelot :
What, what are those ?
Montague :
Why, "God Saved the King ! "

The raising of the curtain on the Fourth Dose was a great success, and we congratulate the Works Department and all concerned on the admirable staging of the Colonnade and the Martha Quadrangle. Four patients in bath chairs, etc., completed a familiar and convincing picture, and we all fell in love with the old lady (R. E. Smith), who was concealing the *Pink 'Un* beneath her *Church Times*. These ladies introduce themselves with a song :—

ACT IV

The Hospital Colonnade.

Sally ;
To see the sights of London Town folk come from far and wide.
They watch the troops, they watch the crowds, they watch the cars collide.
Ruby :
They visit the shops, the theatres, parks, they even go to the Zoo ;
There's a far better show than any of these and nothing to pay to view.

Chorus (All) :
The Hospital Colonnade,
The Hospital Colonnade.
It's far the best entertainment that anyone yet has made.
Susan :
There's Clinical and Dresser, there's Registrar and Clerk.
Clara :
You never know what you're going to see go strolling to the Park.

All :
The Hospital Colonnade.
The Hospital Colonnade.
We sit out here and watch things, we see the whole parade.
Sally :
When 12 o'clock brings Ward Clerks yawning from their morning round,
I always says to Clara I wish I could sleep as sound.
All :
The seaside towns all advertise a splendid Esplanade
But we prefer to come to Guy's and see the Colonnade.

2nd Chorus : Ensemble except penultimate couplet.
Ruby :
The dressers swank along as if they'd bought the blooming place.
But in the Ward, when Sister's there, that's not at all the case.

Clara :
There's always something doing here, no matter what the hour.
I think that Sal would sleep out here, if Sister would allow her.
Susan :
At night you'll hear the scurry of feet—it's a nurse who has been on the loose.
She's terribly late and racking her brain to think of a good excuse.

Chorus (All) :
The Hospital Colonnade,
The Hospital Colonnade.
It's far the best entertainment that anyone yet has made.
There's Clinical and Dresser, there's Registrar and Clerk.
You never know what you're going to see go strolling to the Park.
The Hospital Colonnade,
The Hospital Colonnade.
We sit out here and watch things, we see the whole parade.

Sally :
The Sister comes to Matron to report the Junior Pro.,
Who took the Houseman's T.P.R.—poor girl, she didn't know.
All :
The seaside towns all advertise a splendid Esplanade,
But we prefer to come to Guy's and see the Colonnade.

2nd Chorus : Ensemble except penultimate couplet.
Ruby :
The nurses browse with students, when the Sisters aren't about ;
The Sisters did the same when they were nurses, I've no doubt.

Sally :
To see the sights you ought to come at 2 o'clock to Guy's,
Ruby :
For that's the time the Staff arrive, and everyone looks wise.

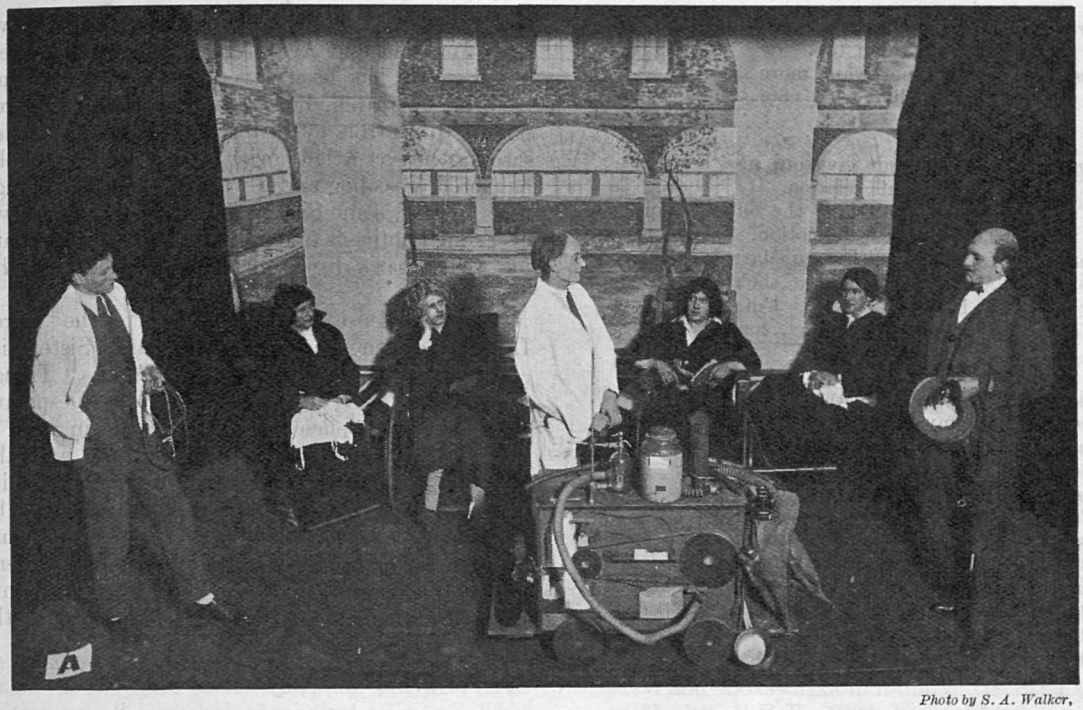


Photo by S. A. Walker.

Susan :
But the Ward Clerk's thinking of Twelve's report, which he's forgotten to write,
Clara :
And the Dresser's thinking of No. 10, who should have been dressed last night.

Chorus (All) :
The Hospital Colonnade,
The Hospital Colonnade.
It's far the best entertainment that anyone yet has made.
There's Clinical and Dresser, there's Registrar and Clerk.
You never know what you're going to see go strolling to the Park.
The Hospital Colonnade,
The Hospital Colonnade.
We sit out here and watch things and see the whole parade.
Clara :
We see the patient's going to have their artificial sun,
I wish they put one in the sky when summer has begun.
All :
The seaside towns all advertise a splendid Esplanade.
But we prefer to come to Guy's and see the Colonnade.

2nd Chorus : Ensemble except penultimate couplet.
Ruby :
When Joey's cheery face appears we feel it's spring at last.
There are some people though who make us feel that summer's past.

Extra Couplets—
We know exactly what report you get when you're X-Rayed—
'Opacities at both the roots ; no diagnosis made.

The Surgeon's always warned about his cases overnight.
That's why you never catch him out ; he's read them up all right.

Dr. Toulton arrives in the Colonnade with the famous "Toulton apparatus," which the ladies consider "better than Wembley," and which the inventor explains with care to the somewhat sceptical Mr. Bavis-Tolley. Petrol Agar turns up, as full of beans and self-confidence as ever, and on being joined by Lena Lipoma (who looked her part very well) joins her also in a ditty which certainly did not err on the side of bashfulness :—

I Wonder what would Happen.

Petrol : I wonder what would happen, if
I asked you if you'd marry.
I wonder, would you answer "Yes,"
Or would you want to tarry ?
Lena : I'm not quite certain what I'd say.
I think it would be "No."
But, if by chance I answered "Yes,"
Just tell me where we'd go.

Petrol : We could go away
To the bright blue sea.
Lena : We'd build a cottage,
Big enough for you and me.

Petrol : We would keep a dog,
And a garden too.
Lena : I could not want more
Than to live with you.

Petrol : We wouldn't give our new address
To any dull relation.
We wouldn't give the outside world
The slightest indication.
Lena : I'd say good-bye to Matron,
And I wonder what she'd do,
If I said "Cheerio, I'm off,
And Petrol's coming, too!"

Lena : We would go away
Petrol : (In my 19/20 Ford).
Lena : To the bright blue sea.
Petrol : (Picture me down in the sea).
Lena and We'd build a cottage,
Petrol : Big enough for you and me.
Lena : We would keep a dog
Petrol : (Bow, wow, wow, wow!)
Lena : And a garden, too.
Petrol : (I refuse to learn to dig).
Petrol & I could not want more
Lena : Than to live with you.

Meanwhile, apparently the X-Ray plans have been muddled and Agar Agar's leg is not broken at all. He has been saved in the nick of time from an operation, but Petrol is about to be reported to Matron by Sister Desperandum for describing her as a lady with a face like a Suffolk half-bred cross hog and a walk like a Buff Orpington. Truly, some Sisters never are pleased, however much notice is taken of them! Arrangements for Agar Agar's discharge are concluded, and the curtain falls.

The final Dose brings us back to the Ward. Lena is now engaged to Petrol Agar. Sister discovers that No. 5 is really Agar Agar. Things are looking fairly desperate, in fact, in Desperandum, when a police constable comes in with a warrant for Sister's arrest in connection with the burning of a hay rick at a farm in Gloucestershire during a recent picnic. Petrol Agar turns out to be the owner of the farm, and agrees not to prosecute Sister if Sister promises not to report him. Lena and Petrol, Emolia and Agar fall respectively into each other's arms, and all ends happily with the chorus of the *Colonnade Song.*

An Appreciation.

WE do not come to criticise—the Residents' Play of 1927 was far beyond criticism—we would but raise our voice in praises loud and long.

The House Surgeon's Dilemma—a rare play, a play of a thousand laughs, a play to be seen for a thousand nights and yet we would not grow weary of it.

Laughter never ceased, and in the end we shouted with mirth at the witty shafts aimed at so many people with whom we are acquainted. No one escaped, and yet they were all gentle arrows of joyous good humour.

To have achieved such perfection must indeed have meant untold work and sacrifice of rest for all the Residents, and we feel that they must have all echoed the query of Mr. Milton, "What hath night to do with sleep?"

We cannot think of any actor better than another—each in his own sphere was excellent. What confidence, what assurance. We mourn that the British stage must suffer while these men choose to follow the medical profession!

The Horticultural Quartette of Nurses was splendid, perhaps not so graceful as we would wish, but then we cannot expect impossibilities, and the alluring Lena—oh, Mr. Pitt, how did you do it? Or, perhaps, you did not, perhaps Mr. Selby produced you! It was not necessary for Mr. Ettles to act—he was just his usual cheery self. Mr. Copley—well, now, is there anything that man cannot do! And Mr. Simpson Smith, as everyone knows, always does everything "so well." His aptitude for tidying makes him a loss to the nursing profession. Mr. R. E. Smith evidently does not miss much that goes on in the Wards. So shall we be careful. As for Mr. Selby, we cannot find words to say what we think of his genius. He is away high up on the mountain top, only occasionally allowing us to catch glimpses of his real art.

We must not forget the orchestra. If we had not gone to see the play we would have been quite happy listening to them all night, they were so good.

Enough, we have trespassed too long, but we only wanted to say a big "Thank you, very much," and to let the Residents and Mr. Selby know that the play was thoroughly enjoyed and appreciated by all, and that all their time and trouble given was not in vain.

THE NURSES.

Bibliography.

By Geo. A. R. Winston, Will's Librarian, Guy's Hospital.

ONE aspect of medical bibliography relates to writings which have a value from one's interest in the author. Their works may not be of any special value to-day, or even of any intrinsic interest, but they may appeal to many Guy's men who, not having access to the various sources of information, would like to keep in touch with the views expressed by the teachers and staff at present engaged at the Hospital.

With this view in mind, a bibliography of the published writings of the Surgical, Medical, Dental and Teaching Staff of Guy's Hospital has been compiled.

The index covers a period during the latter part of 1924 and the first half of 1925. It is intended to publish subsequent lists which will, it is hoped, serve as a useful guide to the literature written by the Staff.

It is much regretted that the bibliography does not contain the names of Guy's men who are no longer on the Staff of the Hospital, but who have written on all branches of medical science. This omission will easily be understood when it is explained that the amount of searching entailed in compiling a complete list of papers by Guy's men who have passed through the Hospital would be an endless task and even, if possible, would probably be very incomplete. It has therefore been considered desirable to limit the scope of these writings to those at present on the Staff.

As most of the journals are published in London the place of publication has been omitted in the references, except when it is other than London.

Barber, H. W., M.D.—
- Tuberculosis of the Skin, *G.H.G.*, 1925, xxxix, 299–303.
- The Acidio Value of the Urine in Skin and other manifestations, *Lancet*, 1925, i, 407–409.

Braine, T. C., F.R-C.S., M.S.—
- A Study of the Effect of Deep Therapy on the Blood in Leukæmia, *Lancet*, 1925, i, 6-10.

Bulleid, A., M.R.C.S., L.R.C.P., L.D.S.—
- An Experimental Study of Leptothrix Buccalis, *G.H.R.*, 1924, lxxix, 444–458 ; and *Brit. Dent. Jour.*, 1925, xlvi, 289–300.
- Bacteriology of Dental Caries, *G.H.G.*, 1924, xxxviii, 455–457.

Cameron, H. C., M.D.—
- Case for Diagnosis : Arachnodactyly, *Proc. Roy. Soc. Med.*, 1923–24, xvii ; *Sec. Study Dis. Children*, 32–34.
- Pneumococcal Peritonitis, *Med. Press*, 1925, N.S., cxix, 67.
- Vomiting Due to Obstruction from Developmental Defect in the Upper Alimentary Tract, *Med. Standard*, Chicago, 1925, xlviii, 13–19.
- Locke, One Philosopher, and the Education of Children, *G.H.G.*, 1925, xxxix, 243–247.
- Limbs and Brain, *Brit. Med. Jour.*, 1925, i, 747.
- *And* Waugh, G. E. (*et al*), Discussion on Pneumococcal Peritonitis, *Proc. Roy. Soc. Med.*, 1924–25, xviii, *Sec. Stud. Dis. Children*, 51–68.
- Some Forms of Vomiting in Infancy, *Brit. Med. Jour.*, 1925, i, 765, 815, 872.

Campbell, J. M. H., O.B.E., M.D.—
- *And* Conybeare, J. J., Comparison of the Test Meal and X-Ray Examination of the Stomach in Health, *G.H.R.*, 1924, lxxiv, 354–366.
- The Geographical Distribution of Exophthalmic Goitre in the British Isles, *Quart. Jour. Med.*, Oxford, 1924–25, xviii, 191–223.

Conybeare, J. J., M.C., M.B.—
- *And* Campbell, J. M. H., Comparison of the Test Meal and X-Ray Examination of the Stomach in Health, *G.H.R.*, 1924, lxxiv, 354–366.
- Influenza, *G.H.G.*, 1924, xxxviii, 429–432.
- Medical Practice in America, *Ibid.*, 1925, xxxix, 247–250.
- *And* Millis, G. C., Observations on Twenty-nine Cases of Addison's Disease, treated in Guy's Hospital between 1904 and 1923, *G.H.R.*, 1924, lxxiv, 369–375.

Cook, F., M.B., B.S.—
- Ante-Natal Clinics, *Jour. Roy. San. Inst.*, 1924–25, xlv, 170–173.
- A Case of Extreme Malformation of the Uterus Associated with Periodic Pain, *Lancet*, 1925, i, 17.

Davies-Colley, R., C.M.G., M.Ch.—
- Tuberculous Cervical Glands, *Brit. Med. Jour.*, 1924, ii, 259–261.

Doubleday, F. N., M.R.C.S., L.R.C.P., L.D.S.—
- The Clinical Aspects of Local Anæsthesia, *G.H.G.*, 1924, xxxviii, 360–367.
- *And* Spain, I. S., Ultra-Violet Radiations : Their Uses and Limitations, *Proc. Roy. Soc. Med.*, 1923–24, xvii ; *Sect. Odontol.*, 81–88.

Dowling, G. B., M.D.—
- Treatment of Syphilis, *G.H.G.*, 1925, xxxix, 54–57.

Eason, H. L., C.B., C.M.G., M.D., M.S.—
- The Training of Nurses, *World's Health*, Geneva, 1924, v, 240–243.
- The Ophthalmic Out-Patients' Department of Guy's Hospital, *Mod. Hosp.*, Chicago, 1925, xxiv, 484–486.

Eckhoff, N. L., F.R.C.S.—
And Symonds, C. P., A Case of Supra-Pituitary Tumour Associated with Frolich's Syndrome; with some Comments upon the Functions commonly ascribed to the Pituitary Body, *G.H.R.*, 1924, lxxiv, 402–412.

Eyre, J. W. H., M.D., M.S.—
Rarefying Alveolar Osteitis due to Streptococcus Pyogenes Longus (*var. viridians*), *G.H.R.*, 1924, lxxiv, 440–443.

Fagge, C. H., M.S.—
Injuries of the Knee Joint, *G.H.G.*, 1924, xxxviii, 549–554.

Gillespie, R. D., M.D.—
The Present Day Physiological Basis of the Clinical Study of Fatigue, *J. Neurol, and Psychopath.*, Bristol, 1924–25, v, 103–114.
The Present Status of the Concepts of Nervous and Mental Energy, *Brit. Journ. Psychol.*, Cambridge, 1924–25, xv; *Sect. Gen.*, 266–279.

Hale-White, Sir Wm., K.B.E., M.D.—
Diseases of Middle Life, *Practitioner*, 1925, cxv, 12–18.

Hurst, A. F., M.D.—
The Treatment of Severe Gastric and Duodenal Hæmorrhage, *Lancet*, 1924, i, 1095–1098.
Migraine, *Lancet*, 1924, ii, 1–6.
Essays and Addresses on Digestive and Nervous Diseases and on Addison's Anæmia and Asthma, *Lond.*, 1924, Heinemann, 447 p., 8vo.
And Briggs, P. J., The Diagnosis of Gastric and Duodenal Ulcer with the X-Rays, *G.H.R.*, 1924, lxxiv, 278–307.
And Briggs, P. J., Diverticula of the Stomach, a possible source of error in the Radiological Diagnosis of Gastric Ulcer, *Ibid.*, 432–439.
Pathogenesis of Gastric and Duodenal Ulcer, *Ibid.*, 413–431.
The Sphincters of the Alimentary Canal and their Clinical Significance, *Brit. Med. Jour.*, 1925, i, 145–151.
The Treatment of Asthma at Mont-Dore, with a Note on the Four Other Spas of Auvergne, *G.H.R.*, 1925, lxxv, 58–65.
The X-Rays in the Diagnosis of Organic Diseases of the Colon, *Brit. Med. Jour.*, 1925, i, 965.
Les Sphincters du Canal Alimentaire et leur Signification Clinique, *Arch. d. Mal. de l'Appar. Digest*, Paris, 1925, xv, 1–34.
A Case of Cerebral Abscess complicating Empyema: Operation and Recovery, *Lancet*, 1925, i, 605.

Lambrinudi, C., B.A., F.R.C.S.—
Maternal Birth Palsy, *Brit. Jour. Surg.*, Bristol, 1924–25, xii, 554–557.

Lane, Sir W. A., Bart., C.B., M.S.—
The Treatment of Fractures, *Lancet*, 1925, i, 263; also *Med. J. and Rec.*, N.Y., 1925, cxxi, 261–263.
The Causation of Cancer, *Proc. Internat. Conf. Health Probl. Trop. Am.*, Boston, 1925, i, 744–760.
The Relations of Diet and Habit in Cancer and to the Allied Diseases of Civilisation, *Cancer*, Phila., 1925, ii, 193–200.
The First and Last Kink, *Lancet*, 1925, i, 1209.
Introduction by, Cancer, How it is Caused, How it can be Prevented, Barker (J. Ellis), New York (1924); E. P. Dutton & Co., 478 pp., 8vo.

Lloyd, V. E., M.B., B.S.—
A Clinical Study of Polypi of the Prostatic Urethra and their Relation to Chronic Prostatitis, with a Report of Thirteen Cases, *G.H.R.*, 1925, lxxv, 234–248.

Marshall, G., O.B.E., M.D.—
Circulatory Changes in Wounded Soldiers, with Special Reference to the Influence of Drugs used for the Production of Anæsthesia, *G.H.R.*, 1925, lxxv, 98–111.

Massie, Grant, F.R.C.S.—
Note on the Diagnostic Value of X-Ray Examination in Traumatic Intestinal Rupture, *Lancet*, 1924, i, 895.

Millis, G. C., M.B., B.Ch.—
And Conybeare, J. J., Observations on Twenty-Nine Cases of Addison's Disease, treated in Guy's Hospital between 1904 and 1923, *G.H.R.*, 1924, lxxiv, 369–375.

Mutch, N., M.D.—
Diet and Toxæmia, *Practitioner*, 1925, cxiv, 84–89.
Arthritis and Infection of the Digestive Tract, *Med. J. and Rec.*, N.Y., 1925, cxxi, 625–628.

Ogilvie, W. H., M.Ch., F.R.C.S.—
The Defences of the Knee Joint, *Clin. Jour.*, 1924, liii, 585–587.
Infections of the Alimentary Tract, *Brit. Jour. Surg.*, 1924–25, xii, 752–782.
Some Notes on the Surgical Aspects of Gall Stone Disease, *G.H.R.*, 1925, lxxv, 78–97.

Ormond, A. W., C.B.E., F.R.C.S.—
And Williams, R. G., A Case of Arachnodactyly, with Special Reference to Ocular Symptoms, *G.H.R.*, 1924, lxxiv, 385–401.

Pritchard, G. B., M.R.C.S., L.R.C.P., L.D.S.—
Gingivitis, *G.H.R.*, 1925, xxxix, 363–367.

Rowlands, R. P., O.B.E., M.S.—
Some Fractures, *Internat. J. Surg.*, Burlington, Vt., 1924, xxxvii, 309–315.
The Waste of Life from Appendicitis, *G.H.R.*, 1925, lxxv, 69–77.

Sarcoma of Bone, *Ibid.*, 197–208.
Cancer of the Stomach, *Brit. Med. Jour.*, 1925, i, 587–589.
And Jacobson, W. H. A. (1847–1924), *G.H.R.*, 1925, lxxv, 125–140, port.

Ryle, J., M.D.—
Anorexia, *G.H.G.*, 1924, xxxviii, 305–310.
Chronic Diarrhœa, *Lancet*, 1924, ii, 101–106.
Obscure Pyrexia, *G.H.G.*, 1924, xxxviii, 486–493.
Gastric Function in Health and Disease, *Lancet*, 1925, i, 583, 641, 697, 754.

Shaw, M. E., M.D.—
A New Technique for the Sigma Reaction, *G.H.R.*, 1925, lxxv, 112–121.

Shipway, F. E., M.A., M.D.—
Warm Ether, *Brit. Med. Jour.*, 1924, ii, 772.
Spinal Analgesia, *G.H.G.*, 1925, xxxix, 104–108,
Acetylene, Ethylene, Propylene, *Lancet*, 1925, i. 1126–1130.
And Lindsay, E. C., Discussion on the Prevention and Treatment of Post-Operative Pulmonary Affections, *Proc. Roy. Soc. Med.*, 1924–25, xviii, *Sect. Surg. Anœsth.*, 41–58.

Slesinger, E. G., O.B.E., M.S.—
Cancer of the Colon, *Med. J. and Rec., N.Y.*, 1924, cxx, pp. xvii–xix.
Surgery in Exophthalmic Goitre, *G.H.G.*, 1924, xxxviii, 383–386.
Fractures of the Lower End of the Radius, *Clin. Jour.*, 1924, liii, 629–633.
The Indications for Operation in Goitre, *Internat. Journ. Surg.*, N.Y., 1924, xxxvii, 475–478.

Smith, G. Bellingham, F.R.C.S.—
The Ante-Natal Clinic, *Brit. Med. Journ.*, 1925, i, 440–443.

Spurrell, W. R., F.R.C.S.—
A Case of Aleukæmic Lymphocytic Leukæmia, *G.H.R.*, 1924, lxxiv, 473–475.

Steward, F. J., M.S., F.R.C.S.—
Cancer of the Breast, Recurrence 31 Years after Operation, *Brit. Med. Jour.*, 1925, i, 156.
Cases Illustrating the Surgery of the Thorax, *G.H.G.*, 1925, xxxix, 327–333.

Symonds, Sir Charters J., K.B.E., C.B., M.D., M.S.—
An Account of the Short Tube for the Treatment of Stricture of the Œsophagus, *G.H.R.*, 1925, lxxv, 141–146.

Symonds, C. P., M.D., F.R.C.P.—
Encephalitis Lethargica, *Clin. Jour.*, 1924, liii, 301–309.
Spontaneous Sub-Arachnoid Hæmorrhage, *Proc. Roy. Soc. Med.*, 1923–24, xvii ; *Sect. Neurol.*, 39–52.
And Eckhoff, N. L., A Case of Supra-Pituitary Tumour, Associated with Frolich's Syndrome, with some Comments upon the Functions commonly Ascribed to the Pituitary Body, *G.H.R.*, 1924, lxxiv, 402–412.
The Ætiology and Classification of the Common Neuroses, *Ibid.*, 1925, lxxv, 159–169.
Sleep and Sleeplessness, *Brit. Med. Jour.*, 1925, i, 869–871.
A Case of Meningitis following Lumbar Puncture Irrigation : Recovery, *Lancet*, 1925, i, 434.

Thompson, A. R., Ch.M., F.R.C.S.—
Some Features of the Elbow Joint, *Jour. Anat.*, 1923–24, lviii, 368–373.
Perineal Prostatectomy, *G.H.G.*, 1925, xxxix, 275–279.
Some Practical Considerations concerning Prostatectomy, *Ibid.*, 196–200.

Turner, P., M.S., F.R.C.S.—
An Analysis of the Results in Fifty Cases of Trans-Septal Orchidopexy for Imperfectly Descended Testicle, *G.H.R.*, 1925, lxxv, 209-221.

Watt, W. L., C.M.G., M.A., M.D.—
Deep X-Ray Therapy, *G.H.R.*, 1924, lxxiv, 459–463.
And Braine, J. C., A Study of the Effect of Deep Therapy on the Blood in Leukæmia, *Lancet*, 1925, i, 6–10. ▭

Papers by Guy's Men.

G. B. Dowling, M.D., M.R.C.P. Syphilitic Macular Atrophy, *Brit. Journ. Dermat. and Syphilis*, 1927, xxxix, 55.

— — and Another. Twenty-Four Cases of Ringworm of the Scalp, Treated by Thallium Epilation, *Lancet*, i, 1927, 389.

H. W. Barber, M.B. Two Cases of Boeck's Sarcoid (Benign Lymphogranuloma of Schaumann). Treated by Intra-Muscular Injections of Sodium Morrhuate. *Proc. Roy. Soc. Med.*, 1927, xx, 347 ; *Sec. Dermat.*, 39.

Arthur F. Hurst, F.R.C.P., and J. Ryle, F.R.C.P. Discussion on the Diagnosis and Treatment of Colitis. *Ibid.*, 367–380 ; *Sec. Med.*, 1–13.

W. H. Ogilvie, M.Ch. A Case of Sexual Precocity with Infantile Paralysis, *Ibid.*, 330 ; *Clin. Sec.*, 20.

C. P. Symonds, M.D. (1) Case for Diagnosis; (2) Syphilitic Encephalitis, *Ibid.*, 383–384 ; *Sec. Neurol.*, 11–12.

Philip Turner, M.S. Old Case of Osteomyelitis of Astralagus, *Ibid.*, 327 ; *Clin. Sec.*, 17.

—— and E. G. Slesinger, F.R.C.S. Discussion on the Treatment of Gangrene of the Extremities, *Ibid.*, 481 ; *Sec. Surg.*, 17–27.

Sir Charters J. Symonds, K.B.E., C.B., Alan Todd, F.R.C.S., and J. Magnus Redding. Discussion on the Treatment and Results of Fractures of the Upper End of the Femur in Adults (excluding the Shaft), *Ibid.*, 441 ; *Sec. Orthop.*, 11–28.

C. Worster-Drought, M.D. Two Cases of Serratus Magnus Paralysis, *Ibid.*, 330 ; *Clin. Sec.*, 20.

— — (1) Two Cases of Hypoglossal Nerve Involvement for Diagnosis ; (2) " Non-Progressive " Bulbar Palsy, *Ibid.*, 385–386 ; *Sec. Neurol.*, 13–14.

— — Dystrophia Myotomica, *Ibid.*, 387 *Ibid.*, 15.

— — Case for Diagnosis, *Ibid.*, 388 ; *Ibid.*, 16.

C. A. Wakeford, L.D.S., R.C.S.(Eng.). Some Observations on the Tooth Band and on the Enamel Organs of the Human Deciduous Teeth, *Ibid.*, 411 ; *Sec. Odont.*, 13.

Martha.

By FARCIUS.

EVER since, many years ago, I wore the King's uniform, and was detailed upon sundry occasions to attend funerals, I vowed to forswear them in plain clothes. Of course, there are exceptions to every rule, and to this one there are two!

The one concerns an old lady with whom I have argued—bi-weekly for seven years—about her colon—and the other is "Martha."

Now "Martha"—I blush to say it—is a "Gamp," yet that hardly explains why she should have attained to such a high position in my affections as to warrant my attendance at her funeral. Naturally, you will think that she has worn out her soul in self-sacrificing attendance upon the poorest of the poor in "Sunnyside Cottages," of which salubrious realm she has been queen for just half a century.

But you are wrong. "Martha" is not a good woman, nor is she beautiful, though her three chins and figure to match cannot quite quench the sparkle of eyes which once held the "Adonisian gaze" of Sunnyside spellbound. No, Martha was not too good ever, and I do not think her eyes drove many youths to suicide, even in the heyday of her beauty. At any rate, she indignantly avers that she can positively identify the father of "one" of her eight children!

Indeed, had Martha's prowess in the great game of work in any manner matched her volatile proclivities in the underworld of pleasure, there had been no occasion for this story. She worked hard and well, and took payment both in cash and kind. Why, it is even in my short memory that the emoluments of a confinement case included one bottle of gin and one of brandy! And yet, in spite of all this, Martha stands out as a great personality in a town of 8,000 inhabitants. What it was about her work or her personality that stood out so prominently is difficult to say. It must have been a complexity of small points. In the first place, in her work Martha was "clean," a point of such rarity amongst her colleagues that one has never ceased to wonder at it. Many a time have I been reproved by a glance from her when leaving a cottage without washing my hands—in an ordinary case, not a confinement. When I came to realise that I never went into a house where Martha was in attendance without finding soap and wash basin, hot water and clean towel all put out, the first red ink mark was allotted. In the second place Martha had a peculiar genius for her calling. I call it genius advisedly, for I dare not guess whether illicit methods of investigation played any part in her uncanny knowledge of the progress of a case. I do not think so either, for apart from this extraordinary instinct, our heroine could smell "trouble" as the "Hoogli Pilot" smells water, only she did so weeks—if not months—before it occurred.

Many other attributes also fell to her lot. She had humour, good and bad; she had sympathy; above all, she had a way with her that could quell an unruly "Primip." late in the second stage. From the moment she took charge of a case until they left the church door on the day the baby was six weeks' old, they were as clay in her hands. Nor did she even—when it suited her purpose—fail in tact. When, late in life, she discovered the inexorable trend of events, she even learnt to work peacefully with the trained nurse; though it must be admitted that, in the matter of relative authority over a patient, both the nurse and the doctor "also ran."

But Martha is ageing now. Her three score and ten years are close upon her, and I see her almost alternately as a patient and in her professional capacity. Still she smiles her cheery smile as she gasps her way up the narrow and winding stairs ahead of me, wishing fervently that her duty would permit of my going first, while she followed more slowly. She sits down nowadays (or nowanights) between the pains, and when the case is over she assures me it is her last. Her retirement, like that of the greatest artists, is always imminent. And so it will remain—if I see aright.

One night, Martha, you will retire—very suddenly—even while you hold the leg with your accustomed skill. The wish that you can hardly yourself express will surely be granted.

"To go on working." "To defy old age." "To die in harness."

Then shall I, if I am permitted, attend another funeral. On that day much that I have written shall sting me to remorse; much that I have left unsaid shall be remembered.

Speciality.

THERE will shortly be published *Who's Who in the Nursing World*. This reference book has been designed to fill a long-felt want by the nursing profession, which hitherto has been without a work of this character. It will be published at 5*s*. net, and on sale at all booksellers. Subscriptions, however, are now being received at 3*s*. 6*d*. per copy, post free, by the Publisher, Mr. H. Edgar Smithers, 139, High Holborn, W.C.1, to whom all communications should be addressed.

Correspondence.

Dr. McGuire.

DEAR SIR.—In lost causes, and successful ones, perhaps the most interesting is the drama—the unknown men thrown up—and no more so than in the American Civil War. Grant, Sherman, Thomas, Meade on the North; Stonewall Jackson, Stuart, A. P. Hill and General Lee, the greatest strategist of the English speaking race, on the South.

And here is a glimpse. Maxey Gregg, who had momentarily fallen under the displeasure of Stonewall Jackson, was lying mortally wounded in a distant farmhouse. Dr. McGuire reported his condition. Jackson requested he should go to Gregg and, "somewhat against his will—for there were many wounded who required his attention—the medical officer rode off." Hardly had McGuire reached his destination than Jackson himself dismounted. "Jackson, forget everything but the splendid services. The interview was brief, and the dying soldier was happier for it. But the scene . . . where in the dark hours of the chill December morning, the life of a strong and an accomplished gentleman was slowly ebbing, made a deep impression. Sadly and silently they rode back through the forest. where the troops were already stirring round the smouldering camp fires." (Henderson's *Life of Jackson*).

Do Lee and the faithful friend of many battles, the white horse Traveller, revisit the cross roads where once they waited till dawn? Do McGuire and Jackson still ride in the forest, as they did that night, "haunting the grave of bygone endeavour?"

RICHARD GILLBARD.

Dean Road,
Willesden Green.

Clean Milk and Bridge.

DEAR SIR,—May I crave a little of your space for two topics?

Firstly, I should like to congratulate Mr. Pugh on his paper on "Clean Milk." It is a matter of the highest importance, and should if possible be got to a wider public by means of the lay Press. I have lived for the last twenty years amongst dairy farmers, and can assure you that the bulk of the milk produced has no pretensions to cleaner lines. Fortunately for me I live within a short distance of a farm which produces "certified" milk, and am therefore in a happy position unknown to most. There is one omission of Mr. Pugh's I should like to bring forward, as it is rather an important one in reducing the bacterial content in milk. You are aware that it is good practice to wash the meatus before passing catheter or cystoscope to mechanically remove bacteria. So with the dairy farmer. The first few pulls go floorwards, and not into the bucket, in order to wash the lacteal ducts. As this matter is so vital to those at the beginnings of life, it seems to me of much greater importance than the recent Hastings' lecture given by the distinguished F.R.C.S. on cancer.

Secondly, Mr. Editor, can you—or, rather, will you—suppress Bridge Competitions and reserve the all too few pages of the GAZETTE to Guy's work and sport. We can get all the bridge lessons and competitions we want from the weekly magazines and daily papers. Give us old 'uns (I have been reading the GAZETTE for nearly 33 years) all the news you can of our Alma Mater. Tell us about the alterations of the Hospital and School. Tell us of the work going on in Hospital and School. Tell us what the Staff are doing, and how they do it. Bully the Residents, Clinicals and Clerks for cases. Let us have some of the wit that flows around, and keep up the sports news.

Even if I were "A," and entered the Competition and had to play that game, I should throw my hand in, as Dummy has only 12 cards in my copy of the GAZETTE!

Yours faithfully,

C. EDWARDS, M.D.

Elvin House,
Andover, Hants.
February 8th, 1927.

Change of Address.

Horace Finnemore, Sydney University, N.S.W.

Dr. J. C. Gie, "Holland House," Cr. Main and Worcester Roads, Sea Point, Cape Town.

Eric Sander, 31, Rosebank Avenue, Sudbury Hill, Wembley, Middlesex.

G. R. Ford, 4, Park Road, Dartford.

E. M. Gilbert, 244, Lauderdale Mansions, Maida Vale, W.9.

M. Weinbren, M.R.C.S., B.Sc., D.M.R.E., 32, Seymour Street, Portman Square, W.1. 'Phone: Paddington 1136.

A. S. V. Daniels, L.D.S., 18, Wimpole Street, W.1. 'Phone: Paddington 2241.

W. E. Coe, 6, Bentinck Street, Cavendish Square, W.1. 'Phone: Langham 3901.

D. H. Couch, 6, Windsor Place, Cardiff. 'Phone: Cardiff 4364.

Reviews.

Chronic Rheumatic Disease. By F. G. Thomson and R. G. Gordon. Published by Oxford University Press, Milford. Pp. 202. *Price* 8*s.* 6*d.*

AFTER a comparatively short contact with the general run of patients suffering from the average complaints for which the doctor's aid is sought, the student will realise that between the medicine of text books and the medicine of practice a gulf is fixed.

The majority of patients who consult the general practitioner—the majority who appear before the O.P.O.'s, in fact—exhibit no physical signs besides a cachectic appearance. It is the treatment of such patients that will form the chief responsibility of the majority of medical students in later life.

It is probably under the heading of "Chronic Rheumatic Disease" that the ailments of the bulk of these patients will fall. There is no group of afflictions so widespread, so inadequately dealt with in text books, and so thoroughly confused in terminology, as the one which forms the subject matter of this work.

Let it be said at the outset that the book will be of little value to candidates for examinations. It's uselessness to this class of reader will, in fact, be in direct proportion to its value to the recently qualified man who has finished with examinations and is embarking upon general practice.

The two authors of this book are consulting physicians at Bath, and therefore have had excellent opportunities for studying the diseases upon which they write. They have produced a book which deals systematically and clearly with a subject by which, at one time or another, every medical student will have been irritated and confused. They have, in fact, introduced into it a lucidity which we have not found elsewhere, and for which they deserve congratulation.

The book consists of three parts. The first is concerned with the clinical aspects of chronic rheumatism, and consists of a series of those "pictures" and clinical types in which the disease usually confronts the practitioner. The authors disclaim any attempt to propound a properly scientific classification, which they consider at present impossible to formulate owing to lack of data. After a chapter dealing with "ætiological factors," in which the hereditary element is stressed with some emphasis, their types are enumerated under the headings of fibrositis, brachial neuritis and neuralgia, lumbago, sciatica, intercostal neuralgia, periarticular fibrositis, arthritis and gout. Five chapters are devoted to arthritis, which is divided into "focal" arthritis—a term which the authors prefer to "rheumatoid" arthritis—osteo-arthritis, spondylitis and climacteric arthritis. These chapters seem to us to be the most helpful in the book, that on climacteric arthritis being particularly interesting.

The second part of the book is devoted to "common mistakes in diagnosis." Under this heading are considered the overlooking of static deformities, of neoplasms, of diseases of the central nervous system, and the mistaking of tuberculosis of bones and joints, syphilis and chronic osteomyelitis of bones for rheumatic disease. A chapter is also devoted to referred pain from viscera.

In the third part are considered the principles of treatment in chapters upon drugs, hydrology, physiotherapy, vaccines and diet.

We cannot help feeling that this work will be well worth the sum of 8*s.* 6*d.* to anyone starting in practice. To the student reading for examinations the book is less to be recommended. But this is not on account of any defects in the book.

Early Mental Diseases. By Various Authors. *Lancet*, extra numbers No. 2. Published by Wakley & Sons, Ltd. *Price* 10*s.* 6*d.*

THIS book is a collection of 41 essays upon the various aspects of mental disease. They have been written by 26 different authors. The editing of these papers has been most capably done in that, in their aggregate, they make a remarkably homogeneous impression on the reader, who is at no point confused by incompatibility of opinion between different authors.

The book consists of three parts. The first is devoted to the subject of the symptomatology of early mental disease such as it reveals itself at different ages. This part begins with a chapter by Dr. H. C. Cameron on symptoms in infancy and ends with a chapter by Dr. J. G. Porter Phillips on symptoms in old age. The second part deals with classification, and is about twice the length of the first. The third part consists of four chapters upon miscellaneous subjects.

The dominant impression which the reader carries away from this book is how remarkably little is known by the medical profession about *early* mental disease. In spite of its title, the references which this book contains to *early* mental disease—the signs which are evinced before such disease has become fully established—are both few and equivocal. There seem to be no symptoms,

or modes of behaviour, which can be said to indicate in any but the vaguest sense that early mental disease is present. Many symptoms are quoted —convulsions in infants, hallucinations and delusions in adults, stupor in adults, deterioration of habits in old age—which unmistakeably indicate the presence of mental derangement. But it cannot be said that these manifestations imply that the disease is early.

When we turn to the other symptoms mentioned we find, in the great majority of cases, that they are not indications of early mental disease.

Thus restlessness, shyness, day dreaming, moodiness, insomnia, self-satisfaction and self-depreciation are modes of behaviour and feeling evinced by practically everybody at different times. To diagnose early mental disease in those exhibiting these qualities would be to leave to an infinitessimally small fraction of the population of the globe a prognosis of sanity.

Specific references to symptoms of bad omen are infrequent in this book. The following are the most definite :

" Temperament, or the mood prevailing throughout life, is important in the psychoses, and changes in this are often a sign of early mental trouble " (Dr. A. A. W. Petrie).

" Apparently causeless and spontaneous outbursts of fear, laughter or rage are included in this group (*i.e.*, the group exhibiting ' inco-ordinated reactions ') and are generally signs of serious significance " (Dr. H. Yellowlees).

" Insomnia is frequently a symptom of early mental disorder " (Dr. Worster-Drought).

" There is no more serious portent than a failure of emotional reaction in general "—*i.e.*, in children (Dr. T Beaton).

" Hypnagogic hallucinations are of importance in clinical psychiatry in that they are often the first symptoms of a commencing toxic exhaustion psychosis and they indicate the need for taking the patient seriously in hand " (Dr. Beaton).

" Delusions of bizarre and fantastic character met with in young people . . . are of grave prognostic import " (Dr. G. W. B. James).

The most far-reaching generalisation with regard to early mental disease is contained in the article on the schizophrenic-paranoid series, by Dr. Mapother : " Their (*i.e.*, of neurasthenics and anxiety neurotics) essential features are respectively morbid fatigability and hyper-activity of the mechanism of fear, and they form the primary departure from the normal in nearly every psychosis, organic or functional."

It is clear, therefore, that a diagnosis of early mental disease must be based upon the judicious weighing of a large aggregate of symptoms.

Except for two articles by Dr. Marion Hutchison and Dr. Millais Culpin, the book is noticeably innocent of psycho-analytic theory. In an article on " the application of psycho-analytical principles" the second of the above writers devotes a section to the theory of the unconscious, a section to the psycho-neuroses and a section to the psychoses. Nothing is said as to the technique of the application of psycho-analysis, which Dr. Culpin apparently thinks is especially indicated for cases of obsessional neurosis. In a somewhat ambiguous sentence at the bottom of page 189, Dr. Culpin seems to express the view that psycho-analysis should not be undertaken by the general practitioner. In this opinion he is supported by Dr. T. A. Ross, who, under the heading of " Minor Psychoses," contributes an article on anxiety states and hysteria which seems to us to be the best in the book. It will certainly be one of the most helpful to the general practitioner.

The book seems to be rather too compendious to recommend to the student. To the general practitioner, however, who is confronted with a puzzling case, it will serve a purpose unfulfilled by any text-book. If he does not derive from it any very helpful knowledge of the symptoms of mental disease in the earliest stages, the fault will lie with the ignorance of the profession with regard to these early symptoms and not with this book.

Surgery of Childhood. By JOHN FRASER, M.C., M.D., Ch.M., F.R.C.S.E. In Two Volumes ; 1,108 Pages and Appendix. Published by Edward Arnold & Co.

MR. FRASER has accomplished a difficult task with complete success, for he has given us in the *Surgery of Childhood* a book which is completely fresh in its outlook. This is not a general surgical textbook modified to make it applicable to younger patients, but such a book as might have been written if there were no surgery but that of childhood. It fills a hiatus of which we were hardly aware before its appearance. For this reason we can predict that it will continue to hold the place which it has made for itself, and will pass through many editions.

We prefer to praise the book in these general terms, for the same excellence pervades all parts of it. The arrangement of the material, and the style of its presentation are of a high order. They betray in the author either an especial aptness in medical authorship or an amount of care in the preparation very much greater than that which is bestowed upon the bulk of medical books. There is a scholarly outlook and a refinement in style which are refreshing, because so unusual in a text-book.

Where additional information is needed to explain some surgical condition it is clearly given. The embryology of a structure is recapitulated where it serves to elucidate the incidence of developmental errors. The physiology of the cerebro-spinal circulation is very clearly epitomised. A passage upon normal micturition in the child leads up to a discussion of the errors with which the surgeon may have to deal. Sections which we found particularly good were those on fractures, on the surgery of the cervical glands, on empyema, spina bifida, pneumococcal peritonitis and appendicitis, and the last chapter on surgical diseases of the lower extremities.

The illustrations, quite apart from the uniform excellence of their reproduction, are one of the most valuable features in the book. The number that are given point to years spent in the preparation and collection of material. We would call attention in this connection to the sections on meningocele and encephalocele, and on deformities of the spine in Vol. I, and on congenital lymphangeiomata in Vol. II. These somewhat uncommon conditions are illustrated by a whole series of photographs of different types occurring in children of different ages, which convey a vivid mental picture to the student who may never have an opportunity of seeing an actual case.

The radiograms again are well chosen and reproduced. Those in the sections dealing with fractures are particularly apt. A lateral oxygen radiogram of a case of spina bifida shown in Vol. II is a wonderful picture. The diagrams are equally good, and are used to explain passages in the text which could not be made equally clear by description. Such are the microphotographs of blood as seen in the tests for compatibility in blood transfusion, the diagrams of the method of inserting a cannula into the superior longitudinal sinus, the various sketches of fracture apparatus, and the figures of Rammstedt's operation.

If any fault can be found with the general plan of the book it is that the author's thoroughness has sometimes led him to describe too many alternatives. While making his review of the subject more complete he has made the teaching less clear to the student by including procedures of purely historical interest or of doubtful value. Examples of this are the alternative methods of filling cavities in bone, some of them quite useless, described on page 273, and the inclusion of nerve transplantation and neurotisation of muscles among the operations described in the treatment of infantile paralysis. The illustrations of the operative treatment of fractures by bands, and of Albee's operation for fixation of the spine, both show the fingers of the surgeon handling the bone. There may be two opinions about the need for strict asepsis in bone surgery, but we cannot help feeling that laxity should be kept out of the illustrations.

These, however, are minor criticisms, which are not intended to detract from our whole-hearted recommendation of Mr. Fraser's work. The *Surgery of Childhood* is a delightful book, a work of reference as well as a textbook, and cannot but help the reader, be he student or surgeon. *O si sic omnes.*

Saint Bartholomew's Hospital Reports. Vol. LIX. 1926. 206 pp. Published by John Murray. *Price* £1 1*s.*

READING the majority of Hospital Reports one is struck by the absence of original material, and this may be due to contributors sending their more important papers to journals with a wider sphere of influence. This may not be true of writers in St. Bartholomew's Hospital reports, but certainly several of the articles are more suited to a text book or clinical lecture.

The report on clinical teaching in America, by Dr. Fraser, is exceedingly interesting and worthy of thought. The conclusion that the number of house appointments in Great Britain is absolutely inadequate agrees with common experience.

Mr. Girling Ball has an account of 50 cases of perforated peptic ulcers. The clinical material is carefully reviewed, and his conclusions as to diagnosis and treatment are likely to be valuable to house officers and practitioners. A special observation is made that the pulse rate is usually not noticeably raised for several hours after perforation—a point that is often not fully realised.

Mr. R. C. Elmslie treats of intracapsular fracture of the neck of the femur. He considers that the risk of putting the elderly sufferer to bed for several weeks has been over-rated. If a fracture is impacted in bad position it is recommended that disimpaction and splinting be practised, as would be done in younger patients.

Sir Thomas Horder has an interesting account of seven cases of Vacquez-Osler disease.

Dr. Langdon Brown's remarks on the life history of hæmoglobin is speculative in the extreme, and represents a series of personal opinions rather than a scientific treatise. The statement about the connection between vitamine A and rickets is not quite accurate, and the cure of rickets in rats by irradiated sawdust is not confirmed. Nor is the opinion that polycythæmia rubra is a new growth of red cells a helpful one.

The eighteen page list of subscribers to this volume is not interesting to the general reader, but, in view of the price of this book, remarkable.

Gray's Anatomy, Decriptive and Applied. 23rd Edition. Edited by ROBERT HOWDEN, M.A., M.B., C.M., D.Sc., LL.D. Published by Longmans, Green & Co., Ltd. *Price* 42*s.*

THE new edition of *Gray's Anatomy* maintains the high standard of excellence held by the earlier editions. The fact that the text book has now passed into its 23rd edition is in itself such a testimony to its value that it seems redundant to comment further upon it.

There are a few alterations, and some additions, in the new volume. The alterations are chiefly pictorial. Old diagrams have been replaced by new. In each instance the new diagram may be said to be a distinct improvement upon the old, the change being chiefly in the introduction of colour. Thus, most of the histological diagrams now appear represented in the colours of the stained specimen from which they are taken, and are thus more easily recognised and understood. Appropriate colouration, applied to some of the microscopic diagrams, renders these more easy of comprehension.

Additions are found amongst the diagrams, and also in the text. The new diagrams mostly represent regions that it is always difficult to picture in the ordinary way. Of these, one picturing the apex of the pleural sac is especially good, so also is a diagram of the hepatic artery and its relations. There are new pictures of the relations of the shoulder joint and of the ankle joint; also of the carotid artery and its relations, and of the occipital artery. A new diagram of the deep relations of the parotid gland is a valuable addition.

There are also minor alterations and additions in the text. The section on blood platelets is rewritten, bringing it into line with modern ideas of the anatomy and function of these bodies.

In the section of embryology there are minor additions, but it seems strange how little new knowledge has appeared in this branch of the subject. There is a small note on the development of the posterior roots of the spinal nerves, and a diagram, with description, of the derivatives of the neural crest. The congenital defects of hypospadias also receive mention, the omission of which from earlier editions seems remarkable. This is true, too, of congenital abnormalities of the alimentary tract and of the spinal column. A short note appears at the end of the appropriate section in each case.

The general arrangement of the book and the terminology is unchanged, and the volume gives a complete and excellent presentation of the whole subject.

It should long continue to enjoy its popularity with the anatomist, surgeon, practitioner and student.

Faith and Friendship. Being the report of the Student Christian Movement of Great Britain and Ireland for the college year 1925–26. Published by the Student Christian Movement. *Price* 6*d. net.*

THE annual reports of societies to which one may or may not happen to belong do not as a rule move one to tremendous enthusiasm. However this, the first of its kind which the reviewer has come across, differs from the usual type not only by making interesting reading but by being definitely stimulating and suggestive in many directions. In particular, one might mention the quotations, scattered up and down its pages, from the reports sent in by various college branches.

Apart from those definitely interested, many who have little use for organised study along Christian lines would probably be surprised at the energies obviously released by such methods.

Guy's Hospital Gazette.

(ESTABLISHED 1872.)

A Journal of Hospital News, Medicine, Surgery, and Dentistry.

Published on alternate Saturdays. Price **9d.**

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including "Directory of Guy's Men (Medical and Dental)," **12s. 6d.** post free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone, Hop 1086.

Marriage.

TURNER—HEATH.—On January 29th, 1927, at All Saints, Braywood, Windsor Forest, by the Rev. C. Ritchie, Vicar Designate of St. John's, Edinburgh, and the Rev. E. Skuse, Vicar of the Parish, Terence Watson Turner, M.R.C.P., youngest son of Lady Turner and the late Sir George Turner, M.B., to Audrey Norma Valerie, youngest daughter of the late William and Mrs. Heath.

Sport.

Rugby.

Guy's "A" XV v. Old Dunstonians.

ON Saturday, January 29th, the 'A' XV played the Old Dunstonians in the 2nd Round of the Senior Kent Cup, and beat them handsomely by 21 points to 3 points. The rain the previous evening had made the ground very sticky and this, combined with the fact that the field was decidedly narrow and had a distinct side to side incline, made any combination among the "threes" a matter of extreme difficulty.

Having lost the toss we were obliged to play down hill the first half, and it was some time before the forwards settled down into their stride. No sooner had they got their opponents into their own "25" than the Old Boys would break away again with long and dangerous forward rushes. These however, were usually successfully dealt with by Johnson, who was playing a very steady game at full back.

Just when the game looked like producing a blank first half, Brown picked up from a loose scrum and, with a curious staggering sort of gait, eluded at least half-a-dozen opponents to score fairly far out. Without wishing to detract from the merits of a very useful and timely try, we shrewdly expect that the reason why he was not tackled was that the opposition were waiting for him to fall over of his own accord. Not long after this Jones received the ball from Thomas and, breaking through in the centre, scored a try, which Tregarthen easily converted.

Crossing over with a lead of 8 points, the forwards settled down in determined style and, getting the ball from nearly every scrum, gave their three-quarters plenty of opportunity.

From a scrum in the Old Boys' 25 the ball came out to Thomas, who side-stepped his opposing number and dropped a clever goal. After some uneventful play in mid-field, Jones smartly snatched up a stray pass and dribbled up the field, only to be held up on the goal line. However, Thomas arrived just in time to finish the movement and score. The rest of the game was spent in our opponents' 25, except for one break away by Wood, the Kent County player, who was only just brought down in time by Johnson. Further tries were scored by Robinson, as the result of a smart piece of work in the line out, and Barnes, who got the ball from a scrum near the Old Boys' goal line and, being unable to pass out, went through the back of his own scrum to score a neat but illegal try. The Old Dunstonians only score came as the result of a penalty, given for offside early in the second half.

Taken as a whole, the play was too scrappy, and there was far too little combined effort in the forward rushes. It was nearly always a case of one man with the ball and the rest nowhere, and that will never do against a team with a good defence. Barnes and Thomas again combined well and were the mainspring of the side, while the three newcomers—Johnson at full back, Robinson on the wing, and Hogbin, the St. Paul's forward—all did extremely well.

Guy's Team—A. G. Johnson; O. Ive, W. H. Smith, W. D. G. Jones, T. G. Robinson; I. K. Thomas, T. J. Barnes; J. C. T. Tregarthen (capt.), C. D. Malone, L. Brown, D. S. Clogg, N. L. Eckoff, G. F. Lashmore, T. M. Calhaem, R. A. P. Hogbin.

Guy's v. Old Alleynians.

THIS fixture was played at Dulwich on January 29th, and will be memorable from the fact that W. D. Doherty, the Irish International and one of the most famous of Guy's football men, turned out most sportingly to fill a vacancy in the Guy's team. The "A" team were engaged in a Kent Cup Tie match, and substitutes were difficult to find at the last moment. It was against his own Old Boys' team he played, and it may be said at once, though naturally slower, he was still the same enthusiastic and inspiring forward.

The very high wind, in our favour, played many tricks with the ball, but both Spence and Wilkinson started very shakily. The ball was constantly coming our way, but nothing much was done with it, and a forward, W. J. Radford, opened the scoring after a hard follow up, Schabort kicking a splendid goal. The next score came from Clarke, who ran in determined fashion for the corner. There was not much brilliance about our efforts this half. The best threequarter was Clarke, who went hard whenever opportunity offered. A mark by Doherty kicked high up into the air, and Guy's forwards sent fast after it, brought a try by T. Morgan, which Boyle converted, making our total for the first half 13 points to 0.

The Old Boys, who really had a very off day, now lost Whiteley, their full back. Bad luck for them, for they could not stand this lessening of their strength. Even the gallant efforts of their England forward Stark, and the untiring leadership of Rex Hellier, could not stimulate the Old Boys. At full back D. Jenkins, who had left the three-

quarter line to fill that position, went for everybody and everything, but tries came quickly. The first of this second portion came from Lewis. Next Clarke cross kicked for Spence to score, Radford converting. A speedy dribble and Lewis crossed again. The whole side were playing much better now, but the threequarters positioning was bad. Time and again they overran the man with the ball, and at times the passing, being too slow, allowed time for the pass to be intercepted. It was good to see Clarke score; he deserved it, running for all he was worth from half way, Radford again converting. Garland and Preen, who had a great afternoon, were always doing clever things. They led the way in neat handling with Spence and Wilkinson for Lewis to score his third try. Garland was the next to put on three points, to which Radford added, and just at the finish Preen put in a typical run, swerving past the full back and bringing the total points up to 42. There was no conversion, so the final score stood—Guy's 6 goals and 4 tries to 0.

Guy's Team—V. G. Boyle; G. J. Clarke, F. J. Wilkinson, F. H. B. Spence, A. J. D. Lewis; J. O. Garland, V. R. Preen; G. G. Cameron, W. D. Doherty, W. H. Myburgh, J. W. Schabort, J. R. F. Popplewell, T. Morgan, W. J. Radford, A. K. Van Niekerk.

The forwards and halves did well, and also Boyle. Garland varied his tactics cleverly. Lewis and Clarke were quite good. The former wants more determination when opposition is met. Go for the line—its the only place where tries are scored. Spence and Wilkinson, especially the former, can do much better. All should get—and keep—fit.

Inter-Hospital Cup Competition

1st. Round.

Guy's v. St. George's.

THE opening of the Cup Season fell this year to St. George's and ourselves. The game took place, as usual, at Richmond on February 1st. We won by 4 goals and 3 tries to a goal from a mark—29 points to 3.

The play at first against St. George's was scrappy; both centres appeared to be suffering from nervousness and they could hold no sort of pass at all. It was J. Durr who gained our first try about eleven minutes from the start, right in the corner.

Plummer, the St. George's back, was also very nervous, and not until he stopped Clarke in full stride for the line did he come to himself; after that he played splendidly. Schabort forced himself over near the same spot as Durr, and at last we put in a thorough and convincing passing movement, which ended in Wilkinson scoring wide out. Durr had kicked well for goal after the previous tries, but this time he kicked successfully from the long range position and near to the touch line.

Lewis had a chance, but he did not go all out, and half time arrived.

On St. George's right wing was L. J. Haydon, the fastest man on the field. He got no chance of attack, but in defence he was sound, and after Durr had got a clear field and a long run to the line Haydon came back and caught him when inches only from the line. Spence next unsuccessfully dropped at goal. Preen now had a bad ten minutes, and the forwards in the back row were slow in heeling. Tucker and Gilmer were also playing on top of Garland. However, play came our way again and Wilkinson's clearance was good; he gave up to Lewis, who got over. Next Garland intercepted and ran clean to the back for Lewis again to receive and score, Durr adding the extra points. Good passing, and a smart reverse movement by Preen, with a number of men having a hand in the run, ended by Schabort grounding beneath the bar. Durr converted again and also converted another try which Cameron obtained after most of the side had handled. All through the game St. George's had tackled well and their forwards, especially Tucker, the English international, had played untiringly. The threequaretrs did not get much opportunity, and neither Haydon or Kirwan-Taylor had one really fair chance. Their goal, from a mark kicked by Higham, came with the last kick of the match.

Guy's Team—V. G. Boyle; G. J. Clarke, F. J. Wilkinson, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. Durr, J. W. Schabort, J. R. F. Popplewell, C. D. Malone, T. Morgan, J. H. Cullinan.

The team did quite well after the first twenty minutes. As a XV we want yet more dash in all departments. Lewis will look round and the threes stood too close and not deep enough. From the Press Box they looked all huddled together. Clarke showed the determination we want, though he missed Kirwan-Taylor once. Garland, Preen and Boyle were their usual good selves. Preen soon recovered from his temporary lapse. Let us have more *Ginger* among the forwards, harder following up, and some devil in the play. Cameron, Popplewell and Schabort were a lively trio—Myburgh, Malone and Cullinan were in the heavy work. Morgan played a better game and Durr was the useful handyman. The eight can do better though, and with hard training should make a very difficult pack to stop, provided they can raise the necessary spirit and dash.

Guy's v. Cambridge University.

THE University brought to Honor Oak Park on Wednesday, February 9th, a strong side, but there were two players absent whom we much wished to see play—Guy Morgan, son of the old Guy's man Dr. T. Morgan and nephew therefore of the famous International threequarter Dr. E. Morgan; the other absentee was Windsor Lewis, the Blue and Welsh fly half back.

On our side neither T. O. Garland or V. R. Preen could appear. At once it may be said that their substitutes did remarkably well, both Barnes and Thomas filling the vacancies very efficiently.

The game opened quietly; neither side could get up steam. The Cambridge pack were heavy and required holding. It was just as well they were held, because behind them was practically an international quartette of Welshmen—Rowe Harding, J. Babb, J. Roberts and J. D. Bartlett. Babb is not a capped player.

An offside infringement within our 25 led to Scott landing a goal, after which Thomas marked and kicked well to the corner. The ball was soon worked to midfield, and then passing ensued. The movement broke down. It was a bitter cold day, and fingers must have suffered very considerably. Aarvold did not seem altogether safe at full back and Barnes managed to tackle him in possession. In the fall he was hurt and not happy after. Our try came from good passing as far as Spence, who ran in wide out, Durr failing at the kick. Allen, of Cambridge, broke away; a good effort carried on by Wakefield. Then came another penalty kick to the Light Blues, which fell just short.

The second half territorially was ours. Spence and Durr set up pressure at once. Spence played exceedingly well and Durr was quite in his old form. Clarke had a typical run and every form of attack was tried. The forwards were all playing well, each in his special department. The pack worked together, which is the secret of a good eight. At full back Boyle was at his best, fielding cleanly, going down bravely and stopping all attacks. Barnes was a real warrior and Thomas did well. One pick up and kick to touch was great. Durr had a long kick and race with Aarvold; the latter just won. On the right Wilkinson dropped a pass with the line at his mercy. More good work and the ball went to the left. This time Lewis dropped the pass. These things were not forgiven and another opportunity of such promise was not given us. Guy's, 1 try (3 points); Cambridge University, 1 penalty goal (3 points).

Guy's Team—V. G. Boyle; G. J. Clarke, F. H. B. Spence, F. J. Wilkinson, A. J. D. Lewis; J. Barnes, I. K. Thomas; G. G. Cameron, W. H. Myburgh, J. Durr, J. W. Schabort, J. R. F. Popplewell, J. H. Cullinan, A. Simpson-Smith, T. Morgan.

The tackling on both sides was superb, the defence most difficult to penetrate. We must cultivate attack direct and forceful. "Fire," and yet more "fire," when the forwards are in full cry, and to the backs one would say, "Go hard and straight for the line, especially hard. Determination is the essence of attack."

Guy's v. Bedford.

IT is many years since Bedford were our visitors at Honor Oak Park. The last match was in December, 1908. The morning of February 5th had been brilliant, yet just as the match was timed to commence the drizzle that had come up with some threatening clouds soon made the thawed ground bad and the ball more than heavy. Mr. Cotter, the referee, handled the game splendidly as usual.

Cameron and Durr were recovering from colds. C. D. Malone and L. Brown took their places. Bedford were not at full strength. An old friend was in their ranks, H. R. Brodie the Harlequin. In the last minute or two Brodie, well known for his dash, was almost over after a good movement. In the tackle he fractured a leg—very bad luck indeed.

The Bedford forwards were not able to withstand the powerful rushes which Simpson-Smith and Popplewell headed. The visitors had really to first take stock of the turf. But one man, R. Eidsforth, the full back, was in his stride at once. He, however, had no chance to stop the forthcoming try. Garland ran clear right up to him and handed on to Spence to get behind, Boyle converting.

Remarkably good passing left Lewis with Eidsforth only to pass. The ball was thrown inside and, as happens nineteen times out of twenty, no score resulted. Perfect play gives the wing man an opportunity; he has his path cleared of all but one opponent. Go for it with all the vim you can muster—pace, dash and, above all, determination. The third try came from Lewis, but previously L. Brown had got over when Guy's had penned Bedford down in their own 25.

The distance in both cases was too great for Schabort to kick the heavy ball in attempting to convert. Half time, 11 points to Bedford's 0.

Resuming, Bedford's heeled more often, and we saw their backs in action for the first time. Both halves were speedy, but the threequarters were held by our quartette. Boyle was his usual efficient self. Notwithstanding thorough defence, Brunwell, their fly half, gained a try for Bedford, the result of good work after a line out. Soon we were back

in Bedford's territory and after numerous passing movements Spence cleared the way for Clarke to score a good try near the corner flag. Still keeping Bedford close up, V. R. Preen, with one of his clever elusive runs, gained a try. Preen generally produces one extra sparkling turn, and this was his to-day. Now Bedford rallied, and we had to hold on a bit. Brodie, sad to relate, was carried off. Garland got right off, running hard ; he tried to punt over Eidsforth's head. The ball went anywhere but in the right direction, and the game ended with Bedford playing strongly, though one short.

Result—Guy's, 1 goal 4 tries (17 points); Bedford 1 try (3 points).

Guy's Team—V. G. Boyle ; G. J. Clarke, F. H. B. Spence, F. J. Wilkinson, A. J. D. Lewis ; T. O. Garland, V. R. Preen ; W. H. Myburgh, J. R. F. Popplewell, J. W. Schabort, T. Morgan, A. Simpson-Smith, C. D. Malone, J. H. Cullinan, L. Brown.

The forwards played very well, Myburgh hooking his best. The threequarters have yet to stand deeper and every player—forwards and backs—must work up all speed possible. It's enthusiasm which will get us home.

Guy's "A" v. Westcombe Park.

ON Saturday, February 19th, the "A" XV entered the final of the Senior Kent Cup by beating Westcombe Park by 6 points to 0. The result was all the more gratifying inasmuch as it enabled us to avenge the defeat suffered at the hands of the same club in the semi-final of the previous year.

The game was of the typical cup tie nature, very hearty and robust, but not over-leavened with skilful play. Both sides adopted spoiling tactics, with the result that neither set of outsides ever looked very dangerous. In addition to this, the very uneven nature of the ground militated against any determined running or intricate passing. As it was, the game remained in the " laps of the gods " until the last ten minutes. The first half was thus unproductive of any score, and the Hospital, playing uphill, although they had their full share of the game, did well to keep their opponents out.

Hutchinson made one remarkably good save, which would otherwise have meant a certain try. Barnes was not too happy with Thomas, with the result that one or two passes went astray.

In the second half the Hospital gradually began to exert their superiority. Except for the first five minutes, and one or two ultimate spasmodic forward rushes, Westcombe Park were kept mainly on the defensive. A breakaway by Barnes from the base of the scrum nearly led to a score, but he left his pass too late and was tackled in possession only a few yards from the line. Next Van Schalkwijk made an opening, but his pass to Robinson was forward, and again a good opportunity was wasted. However, the Hospital were not long to be denied and Van Schalkwijk, making no mistake this time, enabled Robinson to squeeze over in the corner.

The final score came from the best movement of the match. From a loose scrum in our opponents' 25 Barnes, working the blind side, passed out and Robinson who, after running about twenty yards, transferred to Thomas who sent Malone over under the posts. Tregarthen, unfortunately, failed to convert. No-side came soon after with the Hospital again attacking.

Except for a short spell at the very beginning, the forwards played a very fine game, and Jones really excelled himself. His dribbling got us out of several tight corners and he was always there ready to help the defence.

Guy's Team—J. C. Hutchinson ; O. Ive, P. D. B. Spence, J. G. Van Schalkwijk, T. G. Robinson ; I. K. Thomas, T. J. Barnes ; J. C. T. Tregarthen, (capt.), C. D. Malone, D. S. Clogg, J. H. Richmond, G. F. Lashmore, T. M. Calhaem, R. A. P. Hogbin, J. W. H. Jones.

Guy's v. Devonport Services.

THE Hospital turned out at the Rectory Field, Devonport, on Saturday, February 12th, with a weak team, only three of the first team playing. The Services were practically at full strength. Guy's kicked off against the sun, but with the wind.

The first half was evenly contested, and opened with several rushes up to the Services' line, which looked as if they might lead to a score. Boyle attempted a drop at goal, but the ball travelled low. Play then swung up to the other end of the field, and Boyle was tackled under the posts. A score seemed certain, but the forwards came back in support and saved.

The ball then came away on the left, but the movement was spoilt by Bergh, who did not look where he was passing. The Services' left wing broke away and appeared to knock on. Everyone waited for the whistle, except the wing, who kicked the ball over the line, and then kicked it dead, much to his annoyance.

Just before half time Ive, on the right wing, nearly scored, but was pushed into touch.

At half time the sun disappeared.

The second half opened sensationally. The Services kicked off, two Guy's men hesitated to fall and a Services' forward dribbled right through, but just failed to score. After this the Services kept up continued pressure until half way through

the second half. Twice the ball was touched down, and twice it was kicked dead. Three or four times the Services' men were tackled on the line. Once the wing got over, but touched the corner flag. Eventually the Services' right wing received, cut in and scored to the left of the posts. The place kick failed.

After the kick-off play went into the Services, half, mainly due to judicious kicking by Barnes. The game then swung back into the Guy's half, but Robinson got away, beating two men, but was caught by his jersey. Another passing movement broke down at Smith.

The Guy's try was started by Ive picking up a loose ball and passing out. The ball reached Robinson, who beat two men, drew the full back, and gave a reverse pass to Smith, who scored under the post. Tregarthen's kick hit the upright.

The rest of the game consisted of forward play in Guy's half. There were very few free kicks. Boyle played well, but damaged his shoulder, and was not as safe afterwards. Both wings were good, but Ive was safer in defence than Robinson. Smith played well, but was not quite fast enough. Bergh was excellent in defence and saved two certain tries, although his passing was poor. Both halves were good, Thomas taking some difficult passes well. Barnes' kicking and cutting through were well judged. The forwards worked hard, going down fearlessly. Myburgh, Popplewell and Simpson-Smith were the best of the forwards.

The draw was due to the excellent defence of the whole team.

The final score was a try each, 3 points all.

Guy's Team—Boyle; Robinson, Bergh, Smith, Ive; Thomas, Barnes; Myburgh, Clogg, Brown, Tregarthen, Simpson-Smith, Radford, Popplewell, Calheam.

Association.

Guy's v. Southend Casuals.

THE Southend Casuals, who paid their first visit to Honor Oak Park on January 29th, succeeded in beating us by 4 goals to 2.

An old Guy's man in Pickett was included in the visiting team.

Owing to the treacherous state of the ground the football suffered considerably, and the Casuals deserve credit for adapting themselves better to the conditions.

The Hospital, with a much weakened side, played wretchedly throughout. The forward rushes were spasmodic and lacked cohesion, while the passing was often wild, a fault which also applied to the halves.

The Casuals, playing better class football, scored in the first five minutes, but just before half time Guy's scored from a scramble on the visitors' goal line.

During the second half Guy's were mainly on the defensive, and it was not surprising that the Casuals scored three more goals, which were all thoroughly deserved.

E. Evans reduced the lead.

Guy's Team—Evans; Wakeford, Robertson; Ginn, Smallshaw, Fulford; Small, Cantor, Evans, Thomas, Fitzgerald.

Hockey.

Guy's v. Middlesex Hospital.

ON Thursday, February 10th, Guy's easily beat Middlesex in the 1st Round of the Inter-Hospital Cup. In spite of the large score—Guy's won 10–0—and the stickiness of the ground, quite a fast game was enjoyed.

After the first 10 minutes play was mostly in our opponents' half. They found it very difficult to penetrate even our first line of defence, with the result that our industrious goalkeeper was often seen half way up the field looking for work.

The backs were very sound, letting nothing through; the halves also were very good, especially Willett at centre half—he was here, there and everywhere. The outsides were the best of the forwards, magnificent centres coming in from both wings.

Howitt was the best of the insides, who were all slow at shooting in the circle; they might well practice up this, also the correct treatment of corners.

Goals were scored by Howitt (4), Archer (3), Curtis, Catchpole and Camps.

Guy's Team—R. E. Smith; M. F. Awdry, F. E. Camps; S. W. Wright, G. E. Willett, G. N. Carrell; A. H. Curtis, C. N. Howitt, C. A. W. Archer, R. Catchpole, H. O. Lyne.

Boxing.

THE Inter-Hospital Boxing Tournament takes place this year between March 1st and 8th. In view of this, will members of the team turn out and train on Tuesday and, if possible, Thursday evenings?

Competitors for the lower weights, round about 8 and 8½ stone, are still required. Anyone who is about this weight and has done a little boxing is invited to come down to the Gymnasium on either of the above-mentioned evenings.

R. N. C. SMITH, *Hon. Sec.*

Tennis.

AT a General Meeting of the United Hospitals Lawn Tennis Club, held at University College Hospital on Friday, February 18th, the following officers were elected for Season 1927 :—

President—
Mr. E. Yale (St. Thomas's).

Hon. Secretary and Treasurer—
Mr. G. M. Housden (Guy's).

Committee—
To consist of 1 Representative from each Hospital.

The following business was transacted :—

The Minutes of the previous Meeting were read and signed.

The following Motions were proposed and carried :—

That Subscriptions should be discontinued until further notice, as from 1925–26.

That a General Meeting should be called annually before February 28th.

That the date fixed for completion of each round of Cup Tie matches be more rigidly enforced, and power given to the Committee to disqualify any Hospital failing to comply with these dates without adequate excuse.

That all questions arising concerning Inter-Hospital Cup Ties be addressed to the Committee, whose decision shall be final.

The draw for the Inter-Hospital Cup was then made, and First Round Ties resulted as follows :—

London *v.* St. Mary's (Bye to 2nd Round).
King's *v.* Guy's.
St. George's *v.* Royal Dental.
Charing Cross *v.* Westminster.
St. Bart.'s *v.* St. Thomas's.
University College Hospital *v.* Middlesex (Bye to 2nd Round).

G. M. HOUSDEN, *Hon. Secretary.*

Swimming Club.

THE Annual General Meeting of the Swimming Club was held on December 19th in Classroom 1. Sir Alfred Fripp, the President, was in the chair.

The minutes of the previous meeting were read and approved, and then the following officers were elected :

Captain of Swimming and Water Polo—
J. W. H. Jones.

Hon. Secretary and Treasurer—
C. D. Malone.

Assistant Hon. Secretary and Treasurer—
O. M. H. Jones.

Representative on the Committee—
1st year : To be elected later.
2nd year : R. N. C. Smith.
3rd year : C. E. M. de Gruchy.
4th year : L. Brown.
5th year : H. Girling.

The following recommendations were made to the Blues' Committee : That "full Blues" be awarded to C. D. Malone, C. E. M. de Gruchy and R. W. Stephenson ; also that a "half Blue" be awarded to O. M. H. Jones.

A vote of thanks was passed to Sir Alfred Fripp for his services during the year and for his presence on this occasion.

The Committee desire to take this opportunity of expressing their deep sympathy with Lord Desborough, G.C.V.O., a Vice-President of the Club, in his recent bereavement.

Since the Annual General Meeting, C. D. Malone has accepted the captaincy of the Otter Swimming Club water polo team. We congratulate him on his holding of that office. According to a rule of this Club it's secretary is not qualified to hold office on any other swimming club, therefore Malone, although allowing that the Hospital has priority of claim on his services, tendered his resignation. This was accepted, and T. L. Kark was elected to his place. Malone's new office will not interfere with his playing for the Hospital.

The attention of Freshmen and others is drawn to the fact that trials will be held at the commencement of the season, and they are advised not to neglect training. It is hoped to run a second polo team, but this depends on the support the Club receives. Notices of the trials will appear in the Colonnade.

Fencing.

THE Novices Competition was held in the Pavy Gymnasium on Thursday, February 17th. Two pools of six each were arranged, but after the first pool it was found that only three remained for the second, the others having scratched. Therefore, the top three of Pool I, and the remainder of Pool II fought as the final pool.

All sorts of fencing was indulged in—good, medium, bad, and very bad.

C. F. Cosin, Post and Rosenberg qualified for the final from Pool I.

In the final Smithhurst, in dashing style, was defeated only by Cosin. He scored 13 hits for, and 5 against. Cosin was second with two defeats, losing to both Post and Rosenberg. He scored 12 hits for, and 11 against.

Marshall, Post, Rosenberg and E. S. T. Lee all tied for third place, each with three defeats. The barrage was not fought off.

The Fencing Team acted as judges and tried to award hits to the opponents when bouts were properly phrased. It was a little difficult, but all were satisfied with one exception, who questioned an unquestionable decision. Had the decision been reversed the result would have been the same.

Smithhurst is to be congratulated. He should persevere and attend classes regularly; he is likely to become a useful foilist in the near future. Cosin also needs a good deal of practice, and he will improve only when he has lessons from competent instructors. Marshall, who had best control of his weapon, was overcome by the vigorous and dashing style of his opponents.

Gymnastics.

A MATCH with the City of London School was held in the Pavy Gymnasium on Friday, February 11th, teams of five a side.

The Competition consisted of voluntary exercises, two each on the horizontal bar and parallel bars, and one each on the side horse without pommels and the long horse.

Guy's won with a total of 197 marks out of 250, City of London School gaining 180 marks.

Result

Place	*Max.* 50
1. C. H. Johnson	43
2. H. J. Cracknell	41
3. W. J. Johnson	40
4. R. F. Prichard	39
9. N. C. Yendell	34

A return match is being arranged with one set exercise and one voluntary on each apparatus. This will be an advantage to the City of London School, because the majority of them failed to gain "possible" scores as they attempted exercises beyond their ability. H. J. Cracknell, who is a new comer to Guy's Gym., proved that easy exercises well done earn more marks than harder exercises done indifferently. N. C. Yendell must control his knees and ankles; he lost several marks through bending his legs.

Hospital Information, etc.

Pass List.

Pre-Medical Examination.

January, 1927

Chemistry and Physics

†K. C. Gebbie — L. Mortimer
J. W. Mansie — *W. H. W. Raeburn
*L. G. Yendall — G. A. Bell
C. E. M. de Gruchy — *S. M. Whitteridge
*W. J. Wandless — †N. G. Straschun
†W. Hertzog — *I. C. Fisher

† Chemistry only
* Physics only

Second Examination.

PART I

Anatomy and Physiology

T. D. T. Brocklehurst — *W. J. Johnson
G. N. S. Weller — *E. C. Shaw
†E. Lethem — †C. J. C. Siggers
*K. S. Fitch — *H. C. Muirhead

† Anatomy only
* Physiology only

PART II

Pharmacy and Materia Medica

T. S. Daniels — W. V. Beach
W. P. R. Swemmer — G. J. Hollis
H. S. Marks — G. H. Greenway
S. E. Knowles — G. G. Cameron
H. Epstein — G. M. Housden

University of Cambridge.

B.A.

I. B. Morris

Society of Apothecaries of London.

January, 1927.

Medicine

L. W. Rose

Forensic Medicine

W. A. A. Collington

Conjoint.

January, 1927

* Have completed the Examination

Medicine

*A. H. Russell — *M. T. Aung
*L. G. J. Pitt Payne — *N. Rosen
*A. H. Bruce — *J. C. Neely
*A. B. Kettle — *F. G. Parker
*W. Rosenberg — *M. Shaw
*A. Carr — J. K. Moore
M. K. Giji — C. F. Brockington

Surgery

N. H. Skelton-Broune — *L. G. J. Pitt-Payne
J. L. Glover — A. Rabinowitz
*A. B. Kettle — *M. Shaw
G. W. Rake — E. Clayton Jones
R. S. de Bruyn — V. C. Benson
*M. M. Baird — A. H. B. Heesom
*J. S. Rake — *C. G. Townsend
G. R. S. Stewart — P. H. Loretez
C. E. Gallagher

Midwifery

*L. G. J. Pitt-Payne — *J. C. Neely
L. W. Rose — E. Clayton Jones
S. J. De Nevasquez — G. W. Rake
R. S. de Bruyn — R. L. P. Peregrine
J. H. Cullinan — T. S. Daniels
L. Brown — S. C. Lewsen
L. E. Lane — S. T. Williamson
M. T. Brockman — T. G. Benjamin
R. V. Bradlaw

The Services, Army Dental Corps.

Capt. D. Clewer to be Major

EDS. { P.F.S.C. / G.M.H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *March 12th, 1927.* *Number 1008*

PASSIM

THERE is in every successful organisation an atmosphere which is quite undefinable, but nevertheless capable of being sensed and absorbed by everyone, with the result that the individual becomes part of the scheme and thereby acquires added enthusiasm. This atmosphere is often the good heritage from vigorous personalities of the past. We at Guy's proudly realise this in full, where the leaven of such men as Astley Cooper, Bright, Addison and many others still works strongly. Though much of their influence is passed down through channels which escape definition, there are tangible evidences of their greatness, and perhaps the chief of these are their writings.

In trying to estimate to which of the acts of earlier Guy's men we owe our existence as a leading medical school, there stand out those which led to the foundation of what have become three traditional institutions of the Hospital, namely: The writing of Clinical Reports, the publication of Guy's Hospital Reports, and the Pupils' Physical Society. In these three institutions there are all the elements for the best scientific development,—the cultivation of the powers of observation, the selection and publication of considered views, and the facilities for genial discussion.

It is to Addison that the first organised system of case reporting is due, for it was his custom to lecture regularly on the cases, written up by his Clinical Clerks; but these reports were quite voluntary. A later development from this was the Clinical Report Society, which was founded in 1836. Members of this Society met at weekly intervals for the purposes of reading the reports on cases under their observation. It is of interest to notice that the success of this Society was due in the main to the enthusiasm of the students themselves, for it was not till more than ten years later that case reporting became a compulsory item of the medical curriculum.

An early publication of some cases at Guy's Hospital was brought out by Sir Astley Cooper, Dr. Haighton and Dr. Babington in 1798. These were chiefly accounts of experiments in treatment and a record of Cæsarean Section. It was not, however, till 1836 that the regular issue of *Guy's Hospital Reports* was started, and it is to them that Wilks and Bettany, in their *History of Guy's Hospital*, attribute much of the advance of the "new school at Guy's."

The high standard of these Reports has now been maintained for over 90 years, during which they have included many original expositions of epoch making importance, and have won fame in all parts of the world.

Until 1921 the *Reports* were produced at yearly intervals with an occasional omission, but it was felt after the war that, with the increasing number of medical journals eager for literature, it was undesirable to postpone for twelve months new original work by younger men at the Hospital. So Dr. Hurst, with his usual amazing energy started the quarterly publication—an achievement which no other Hospital in the country has been able to attempt. With the commencement of the quarterly issue the character of contributions underwent a noticeable change from the rather heavy analysis of statistical material to more readable articles and records of interesting cases in the Clinical Wards.

That this character should be maintained is obviously highly desirable, and it is therefore with feelings almost of consternation that we receive a letter from Professor Johnston stating that unless the subscription list is increased the *Guy's Hospital Reports* Editorial Committee will have to consider very seriously whether it is financially possible to continue the quarterly issue in the present form.

To extract from an unlimited mass of medical literature that which has the quality of soundness is a mighty task, and it therefore seems to us that

an appeal to Guy's men to support a journal which has the hallmark of their school and a reputation for careful and practical observation, with the added interest of presenting the ideas of men who are often remembered as former teachers, cannot fail.

In this number we insert a Banker's Order Form and specially request that our readers will use this convenient method of subscription.

The first part of an excellent film, the work of Col. Harrison, demonstrating the modes of infection, the stages and varieties of the manifestations of syphilis and diagnostic methods, was shown in the Physiological Theatre recently by Mr. V. E. Lloyd. Whether the novelty of this new method of teaching is responsible for the interest it stimulated is difficult to say, but the fact remains that it held the attention more closely than any Wild West drama, despite the lack of the accompaniment of appropriate music. It seems a pity that this manner of teaching is not much more widely used, as it certainly could be combined with lectures—and often substituted—with advantage.

We notice with pleasure that Dr. R. D. Gillespie is giving a series of lectures on Normal Psychology, intended particularly for the men in their pre-clinical years. It has always seemed to us that this subject has been much neglected in the scheme of medical education, which surely should be directed to give training in the treatment of the personality as well as the person.

It is with sorrow that we record the recent death of Sir John Utting, an early Editor of the Gazette at a particularly difficult period of its life. Liverpool has lost in him one of her most prominent and kindly citizens, whose life work it was to improve the conditions of public health of that city.

We offer our congratulations to Mr. W. E. L. Brigham, L.D.S., who was recently placed first in the Entrance Examination for the Royal Naval Dental Service, and who has now passed out of Haslar, again at the head of the list, and has been recommended for the award of a Gold Medal.

Bites.

A Paper read before Guy's Hospital Dental Society by G. N. S. Weller.

MR. CHAIRMAN AND GENTLEMEN,—When talking of bites one is dealing with one of the most important sections of prosthetic dentistry, for if the bites are not made satisfactorily, and the operation of taking them is not performed correctly, then the finished dentures are of very little use to the patients. It is therefore necessary that the bites should be made of some firm material which will not be distorted in the mouth. The materials used are wax, composition, resenoid compounds and guttapercha; these materials being attached to a base plate of metal or vulcanite.

Wax is most commonly used on account of the ease with which it can be worked, the drawback to it being that it is very easily distorted in the mouth.

In making the bite plates, some operators prefer to make the plates in one piece, as recommended by Dr. W. Evans; others prefer to make the base plate first.

Dr. Charles Turner's method of making the plates for the upper jaw is to make them in one piece. The model is placed on the bench with the distal portion towards the operator. The modelling compound is then softened in warm water and rolled into an ellipsoid, about two inches long. One side of this is thinned out, and the mass is placed on the model so that the thinned portion projects beyond the posterior margin of the plate outline. The area over the vault of the cast is pressed down until it is about the thickness of the finished dentures. The rest of the mass is then gradually worked towards the alveolar ridge, and just carried over, but the greater part of the mass is left upon the ridge, in order to form the required occlusal portion of the bite plate. It is then taken from the cast and the edges trimmed and made to fit, in order to obtain perfect retention.

In making the bite plates for the lower a roll of composition is made and bent in the shape of the alveolar ridge, it is then placed on the summit of the ridge and, with the thumb and finger, worked down the lingual and labial sides. It is then taken off the model and trimmed up. If it is found that it is very thin, then it should be strengthened with a piece of German silver wire. Also Dr. Turner recommends the method for the making of bite plates, this time in two parts.

First, the base plate is made of pattern tin by pressing it on the model and trimming up. This forms quite a firm base, and also prevents any sticking to the model.

The occlusion portion of the plate is built up of pink wax by rolling the wax and bending it to the shape of the alveolar ridge, and working it down with the finger and thumb.

Mr. Fry's method for making the bite plate is to use Graft's base plate with the occlusion portion built up in composition with a layer of wax on the upper surface for recording the bite, and a thin layer on the under surface in order to give better retention.

Vulcanite base plates are sometimes used, but are only used where the alveoli have receded, the advantages of a vulcanite base plate being its ability to detect faulty impressions, and also in giving a better support than ordinary base plates when setting up.

The disadvantages are that the base plate is vulcanised more than once, thus causing it to shrink and become less flexible.

The occlusion portion is built up of pink wax, the labial and buccal surfaces being added to or carved away, as the case may be. This first shape is simply guessed at in order that it can be placed in the mouth.

The building up of the occlusion portion of the bite plate is one of the most important parts of bite making. The fit of the plate is also very important, as the bite plate would be of very little use if the occlusion portion was not built up properly.

In building the occlusion portion, the centre of the ridges should be marked on the models, and this mark should be used as the blocks are built up, in order to keep the block over the centre of the ridges.

The object of the mechanic is to build the bite blocks up so that the occlusal surface of the bite blocks should be in the "neutral zone," to use Mr. Fry's term. Of course, the lower parts of the blocks are built out in order to restore the facial contour of the patient. The term "neutral zone" is used by Mr. Fry to represent that area over the ridge which is not interfered with by the tongue and cheeks. In the molar and pre-molar region, the blocks should correspond to rather bulky teeth and gums, and should be directly over the centre of the ridge.

The anterior portion should be built up rather fuller than is really needed, as it is much easier to cut away than to add. Also the occluding surfaces should be flat, as these surfaces mark the future occlusal plane of the teeth. The plane of the occlusal surface should be parallel with the naso-auditory meatus line—that is, a line drawn from the lower part of the nose to the external auditory meatus.

This is arrived at by fixing a straight edge to the occlusal surface of the bite plates, which projects a short distance from the mouth, and comparing this with a piece of string stretched between the two points, namely, the external auditory meatus and the lower end of the nose.

A very useful method of making bite plates is to use a small set called the "permanent." This set consists of upper and lower plates made of metal. Instead of the actual occlusion portion of the lower being made of wax it is made to represent the future teeth, so that we really have a metal denture.

The upper simply consists of a metal plate, the occlusal surface being flat.

When the bite is taken a sheet of warm wax is pressed into the under side of the plates, and they are then placed in the mouth and pressed down on to the gums.

On the occlusal surface of the upper a sheet of warm wax is placed, so that the lower teeth have something on which to bite and leave their impression. This method is very useful for branch practice, as bites can be taken at the same time as the impression.

We now come to the taking of bites, but before they are sent to the surgery they should be made to look clean and neat, as it is much easier to work with clean plates; also dirty plates are an eyesore to the patient, for no patient likes to have dirty masses of wax pushed in their mouth.

Before the plates are placed in the mouth the patient should be made comfortable, with the head almost upright. The plates are then placed in cold water for a short time to make sure that the wax is quite hard.

The lower one is placed in first, the first and second fingers being allowed to rest in the pre-molar region. The operator should then try to rotate the plate in order to find if the fit of the plate is satisfactory, for it is of very little use to carry on with the operation when the plates do not fit. Also, if any tender spots are found then these should be eased for, if left, the patient will refrain from biting on these spots, and thus give a wrong bite.

In some edentulous lower cases it is found that when pressure is applied at the back the plates slip downwards at the back and upwards at the front. This is caused by the alveolar ridge running up at the back. In such a case the posterior end of the block should be cut off, but not the base plate.

In the edentulous upper the plate often has an antero-posterior rock, which is generally caused by a hard patch in the palate; this should be compensated for by a suitable relief chamber

When the operator is satisfied with the fits of the lower, he should ask the patient to place the tongue on the posterior part of the hard palate, at the same time to open the mouth. If the plate moves the force which causes the movement should be found and put right.

In the first case, when the tip of the tongue is placed at the posterior end of the hard palate the common cause of movement of the plate is found to be the frenulum of the tongue, and also by the floor of the mouth around the tongue. Therefore, the plate should be eased in these places, so that when the patient repeats the action the plate does not move.

In the second case it is caused by the edges being too deep, and on opening the mouth the muscles push on the edge and move the plate. In this case the edges should be cut down until the plate is just clear.

Movement of the lower plate is also caused by the tongue, cheeks and lips. If this is found to be the case then the blocks themselves should be cut down on the labial and lingual aspects. This causes, in some cases, a very narrow occlusal surface of the blocks. If this is the case then the future teeth should be small, for if large teeth were placed here then they would cause an undercut, in which the tongue or cheek would catch and dislodge the plate.

When the plates satisfy the operator as to their fit and bulk they should be placed in the mouth, and the patient asked to close. It will probably be found that the mouth will not close properly because the blocks strike one another in the molar region. The operator should then notice where they strike, and also their lateral relationship—that is, if the upper closes on the tongue or cheek side of the lower. If it is found that the blocks do not meet, occlusal surface to occlusal surface, then the operator should inspect the mouth of the patient with an eye to moving one of the plates.

It must be remembered that there is the tongue to think of when talking of the lower, and therefore, if possible, the upper should be moved. But there is one disadvantage to this, and that is the tilting of the upper. Therefore the operator should notice these points on the patient when fitting the plates, and he should choose the lesser of the two evils. The bites must then be cut down in order that they fit—that is, the occluding surfaces of the blocks should be in contact all round. In doing this more wax, if possible, should be cut from the upper block, for it must be remembered that gravity acts on the upper, therefore the lighter the plate the more retention. But it must also be remembered that if too much is taken from the upper, then there will be very little bulk on to which the teeth may be fixed, also that the upper block be one-sixteenth of an inch below the upper lip.

While letting down the bite there is no need for the patient to bite correctly, for instructions as to the way he should bite would only worry him at this stage, and the actual taking of the bites would be rendered more difficult. But any position that he closes on repeatedly should be noticed, as this might be the correct bite.

It is often found that the patient will first close to one side of the mouth and then to the other. This is perhaps caused by the bite block on the one side being a little higher than the other side, and the patient is trying to adjust the mandible to suit it. Or it might be caused by tender spots causing the patient to bite in the most comfortable position. On no account must the blocks be softened and then squeezed into place, for it is often found that at first the patient bites on the front teeth first, thus causing an incorrect bite. Also the blocks might be unevenly heated and thus cause a tilt.

When the operator thinks he has taken enough off the blocks he should ask the patient to close the mouth. He should then notice if the jaws are too far apart or too close.

In the first case the blocks should be trimmed down ; in the second more wax should be added until the correct position is attained.

At this stage the operator should endeavour to alter the facial contour of the patient—that is, to restore the youthful appearance. And in this role the dentist has to change his profession and become an artist. It is not acquired in five minutes, but needs experience and skill.

He should therefore have some knowledge of the appearance of the normal face, and be able to compare it with the face of a person who has lost all his teeth.

The outline of the average face, with all the teeth present, is found to resemble an egg, the broad part of the head being at the top. This should be kept in mind when building out the cheeks, as any undue bulk in the molar region would tend to reverse the shape of the face by making the broad part at the lower end.

The lips of a well-formed mouth should also be noticed ; the upper lip will be found to project further forwards than the lower. This should be considered when building the bite blocks around the incisor region. The deep furrow which separates the chin from the lower lip should also be noticed.

One more furrow, which is of importance to the dentist, is the one which runs from the fossa above the ala of the nose and curves downwards, to pass just outside the angle of the mouth. This furrow is very pronounced in old age.

These points should be remembered by the dentist when restoring the youthful appearance of the patient, and also such useful hints as are given by Gabell, that additions of bulk in the molar region have very little effect in pushing the cheeks out, and that a moderate bulk in the canine region fills out the naso-labial furrow, and also raises the corners of the mouth, thus creating a happier expression.

When this stage is reached, and the appearance and stability of the plates are found to be satisfactory, then the correct position of the jaws, or relation of the jaws, should be found.

The correct position of the lower jaw is always the most posterior, therefore when performing this part of the operation the operator should take time in explaining to the patient exactly what he wants him to do.

The patient is asked to retrude the mandibular after having been shown by the operator. This should be repeated until carried out correctly. The bite plates are then placed in the mouth and the patient asked to retrude the mandible, close the jaws and hold the plates firmly. At the same time he is asked to swallow, as this places the mandible in the correct position.

There are many ways in which this can be done. I heard a short time ago of a dentist who, when performing this part of the operation, always asked the patient to walk round the room with the bite plates in the mouth and mouth wide open, and then at some unexpected moment he would pounce upon the patient and snap his jaws together, thus obtaining the correct position. Whether he obtained the correct position or smashed the plates was not mentioned.

In the case of the patient who finds it very difficult to retrude the mandible, then Dr. Molyneaux recommends the use of Garretson's device, which consists of two steel strips about six inches long, at one end of which are projections made to fit in the external auditory meatus. A leather strap is attached to this edge, which is made to fasten over the top of the head, and thus prevent the strips from slipping. At the other end of the strips a small chin plate is attached which works on a racket.

The patient is asked to open and close the mouth repeatedly, and, as this is done, the chin plate is slipped upwards until it is certain that the condyles are in the glenoid fossa.

When the correct position is thought to be found then a further test to ascertain if the condyle is in the correct position is to place the fingers on the anterior portion of the temporal muscles. The patient is then asked to bite fairly firmly on the plates. If the condyles are in the normal retruded position then the muscles will be found to contract, but if the condyles are too far forward no contraction of the anterior fibres take place.

When the correct position is found then the lips should be parted, and the median line of the face is marked on both blocks. The upper lip is raised as in smiling and the highest point to which it reaches is marked; this is known as the high lip line, and shows the amount that the finished bites will show.

In the molar region a few deep lines should be made on each block, so that when taken out of the mouth they will be placed together again in their correct position.

In the case of the man who does not possess an anatomical articular then the operation ends here, but the possessors of certain makes of anatomical articulars proceed with the next step, which is to obtain the correct condyle path.

By the condyle path is meant the path taken by the condyle of the mandible when the lower jaw moves from the retruded to the protruded position. The course generally taken is a course shaped something like a straightened letter S. But only a small portion of its path is needed.

When the condyles slides forwards they glide down the articular tubercle, causing the incisal portion of the bite blocks to be brought together, and the blocks in the molar region are separated. Now, if the forward movement be measured, and the distance between the bite blocks in the molar region be measured, then it is possible to work out the movements of the condyles.

These measurements can be obtained by using Dr. Snow's bite gauges, which consist of a small plate of metal which can be fixed to the lower wax block. The upper surface of the bite gauge carries a blunt metal spike.

The gauge is pressed into the occlusal surface of the lower bite plates. It is then placed in the mouth, and the patient told to protrude the mandible and close the jaws. By doing this the spike on the lower pierces the occlusal surface of the upper block, and the required position of the plates is obtained. The plates are then carefully removed and the required condyle path established.

The object of taking this condyle path is only of importance when setting up the teeth for anatomical articulation, for the correct antero-posterior movement of the jaw is thus obtained.

When the models are finally placed on the casts their fit should be noticed, as sometimes it is found that they do not fit the models properly. This is caused by the soft gums being represented by the hard plaster. These faults should be corrected before the patient leaves, as any accidents which might occur can be put right while the patient is present, but if they occur while the patient is absent then it perhaps means an extra appointment.

In making bite plates for partial cases it is better to construct them of a strong thin sheet of modelling compound. Spaces between the teeth should be built up with additions of modelling compound to the level of the adjacent teeth at such places where the teeth of the opposing jaw occlude and stay the bite.

At such places that the teeth of the opposing jaw stop the closure then soft wax should be used, as the tooth or teeth can then bite into it.

In partial bite plates it is often found that the plate would very easily break, therefore it is necessary to strengthen with iron wire or German silver wire.

The actual taking of the bite of a partial denture is not so difficult as in the case of a full upper and lower, for the standing teeth serve as a guide to the correct bite. But in some cases the remaining teeth may not be in their normal positions. Then, in a case like that, the correct bite has to be found as in the full upper and lower.

Also when the teeth on one side are the only ones remaining, then the patient develops a one-sided bite.

Another point to remember is that the small plates often sink into the gums, while the natural teeth remain on the same level.

The masticating strains are very heavy, and consequently a tilting will perhaps occur if necessary precautions are not taken. This is best avoided by proper shaping of the occlusal surfaces of the teeth. Therefore, it is most important to find the probable amount and direction of the settlement of the plate, and spread the plate in the best way to stop this sinking.

In trying to stop this sinking certain defects of the gum should be looked into. Gabell gives a list as follows :—

Firstly, the absorption of the outer alveolar plate in the upper jaw ; this causes the foundations to become much narrower than the surface receiving the bite, and a tilting strain is imposed.

Secondly, this softness of the gums. In this case the gums should be attended to before dentures are made, as soft gums render steadiness impossible.

Thirdly, the gums, or bone under, may be tender to pressure. In this case the plate should be eased.

Fourthly, the shape of the support ; this sometimes causes the plates to slide.

And, fifthly, further absorption of the alveolus. This is caused by undue weight or by not waiting long enough after the teeth were extracted. Therefore, a case like this should be left until the bone has settled.

After the operator has satisfied himself as to the state of the gums, and also the type of plate he will use, he will then proceed. It is essential that he should notice these points at this stage, as the bite plates of a partial should resemble the finished denture as closely as possible.

When the base plates and blocks are satisfactory as regards their fit and stability, then the particular way in which the patient articulates the remaining teeth, without the blocks in the mouth, should be noticed, for if they are normal and occlude properly they will serve as a guide to the correct bite. But if they are abnormal, then the occlusion should be put right as far as possible.

In raising the bite of partial cases it is found to be more difficult than in the case of edentulous cases, for the teeth that remain should not be propped apart, also it causes more strain on the finished dentures, for a person who has been used to closing the jaws to a certain point will continue or try to do so after the bites have been raised, thus causing the greater strain.

The blocks should then be placed in the mouth and the patient asked to bite. The natural teeth should be noticed to see that the bite is correct. The plates are then waxed together, or marked, as in the case of the full upper and lower, and taken out of the mouth and placed on the models. Their fit on the models should then be noticed, and, if not good, should be corrected, the patient being present during the correction.

Papers by Guy's Men.

W. Sampson Handley, M.S., F.R.C.S. The Radium Treatment of Sternal Recurrences in Cancer of the Breast, *Clin. Jour.*, 1927, lvi, 73.

R. D. Gillespie, M.D., D.P.H. Fatigue : A Clinical Study, *Jour. Neur. and Psychopathology*, 1926, vii, xxvi, 97.

J. Allan Berry, M.S., F.R.C.S. A Case of Multiple Aneurysms of the Splenic Artery, *Lancet*, 1927, i, 490.

Medicine in Antiquity.

From a Lecture by Dr. C. Singer, Lecturer in the History of Medicine to the University of London.

Continued.

The Medicine of the Greek Physicians

We may now turn to the other side of the picture. Nothing could be in greater contrast to the charlatanry of the priestly system than the calm and stately beauty of the best Greek medical writings. The finest of these are undoubtedly to be found in the so-called *Hippocratic Collection*, the date and nature of which have already been discussed.

The question will, naturally, be asked, "Which of the works of this great collection is by Hippocrates himself?" and to that question, it must be feared, only a very disappointing answer can be given. There is not a single work extant which we can rely on with certainty as being by the Father of Medicine. Modern critical examination of the *Hippocratic Collection* has shown beyond the shadow of a doubt that the books of which it is composed are the work of a number of authors, belonging to different schools, holding various and often contradictory views, living in widely separated parts of the Greek world and at dates divided from each other, in the most extreme cases, by several centuries. We have no standard of genuineness whatever, and the greatest degree of certainty that we can claim for the finest books of this Collection, *e.g.*, the *Aphorisms*, the work "On Wounds of the Head," the "Epidemics" or the "Prognostics," is that they contain nothing inconsistent with a Hippocratic origin, that their ethical standpoint is in accord with the Hippocratic ideal, and that they are the work of a physician of great intellectual power and experience.

If we ask what is known about Hippocrates himself the answer must be almost as meagre. With certainty, we know very little. We can be sure that he really existed, and that he is not a mythical figure, for he is not a mythical figure, for he is mentioned with high respect by his younger contemporary, Plato. He was born at Cos about 460 B.C., the son of the physician Herakleides and his wife Phainarete. His most important works would thus begin to appear about 420 B.C. His death is placed between 377 and 359—the latter would make him 101, a very appropriate age for a great physician. He led a wandering life, and is heard of at Cos, Thasos, Athens, in Thrace and elsewhere, and, lastly, in Thessaly, where he died, and where his grave is said to have long been shown on the road between Larissa and Gyrton. Among his pupils were the physicians Praxagoras the elder, Apollonios and Dexippos, his two sons Thessalos and Drakon, and his son-in-law Polybos. Of the works of the latter we have indisputable fragments preserved for us both by Aristotle and in the *Hippocratic Collection* itself.

That is all that is known with certainty about the Father of Medicine. We have not even his portrait. Yet we have something which for historical purposes is far better—we have an idealised representation of what the Greek would wish his physician to be. It is a noble bust, to which the name of Hippocrates was early attached. Many copies of it exist, and to the calm, righteous and dignified presence which it portrays medical men will continue to pay homage.

But if critical examination has thus dealt with the Hippocratic writings and with Hippocrates himself, it may be asked what has been left which we may surely derive from the Greek medical system? The answer is—two great things, the picture of a man and the picture of a method.

The man is Hippocrates himself. His figure, perhaps gaining in dignity for what it loses in clearness, stands for all time as that of the ideal physician, for the ideal is there and is clearly set forth in these great writings whether we discern the details of his features or no. Calm and effective, humane and observant, prompt and cautious, at once learned and willing to learn, eager alike to get and give knowledge, disturbed only by the fear lest his knowledge may fail to benefit others—both the sick, and their servants the physicians—incorruptible and pure in mind and body, the figure of the greatest of physicians has gained—not lost—by time. In all ages the reverence of medical men for the greatest of their number has been comparable only to that which their followers have felt towards the founders of the great religions. The figure of the Hippocratic physician has been of incalculable ethical and spiritual value to the medical profession in the 23 centuries that have passed since his death.

The method of Hippocratic medicine is that known to-day as the "experimental" or, better, "experiential." It was followed among the Greeks for centuries after his death. Then came a time when a social and philosophical upheaval prevented its further prosecution. For a thousand years after the series of events that led to the

break-up of the Roman Empire, the medical practice of Europe was at best a corrupted imitation and misunderstanding of his teaching; at worst, it descended to a low level of animism and magic. Then there was a rally, and slowly—very slowly at first—the foundations of modern science were laboriously laid. Among the first elements in this scientific renaissance was the recovery of Hippocratic works—or imitations of them. For some centuries more, his very words were taught in the medical schools in a spirit that was anything but that of Hippocrates.

Gradually, however, a better understanding crept into men's minds. The spirit of those writings and their methods and observations were now rightly emphasised more than the works themselves. These works themselves began to drop out of the curriculum, and rightly so, and they are not now used in any medical school. But if we turn again to contemplate the Hippocratic treatises, we may still see at work the modern process of careful record of data and cautious inference from them, that collation of experience from various sources obtained by various methods with which we are now so familiar. We may see even the actual process of case taking, bedside instruction and clinical lecture in full force, being practised much in the way in which we know it, and described for us with a conciseness and beauty of language and a loftiness of ethical tone which have never been surpassed. To such a collection medical men must always return. With a few extracts from these writings we may therefore most appropriately close our brief sketch of Greek medicine.

The Hippocratic Oath is a magnificent passage, which, though usually included in the *Hippocratic Collection*, is probably, in its present form, of much later date. Yet parts of it may be even earlier than Hippocrates, and some suggestion of it has been seen in the Ebers Papyrus of 1500 B.C. It need hardly be said that its late date by no means removes the interest of this grand ethical monument. The first author who mentions the Oath is, however, of the first century A.D., but Galen, our best and bulkiest authority on ancient medicine, is silent upon it. No passage, however, better reflects the spirit of the Hippocratic physicians.

"I swear by Apollo the physician and Asclepius and Hygeia and Panacea, invoking all the gods and goddesses to be my witnesses, that I will fulfil this Oath and this written covenant to the best of my power and of my judgment.

"I will look upon him who shall have taught me this art even as mine own parents. I will share with him my substance, and supply his necessities if he be in need. I will regard his offspring even as my own brethren, and will teach them this art, if they desire to learn it, without fee or covenant, and will impart it by precept, by lecture and by all other manner of teaching, not only to my own sons, but also to the sons of him who has taught me, and to disciples bound by covenant and oath according to the law of the physicians, but to none other.

"The regimen I adopt shall be for the benefit of the patients to the best of my power and judgment, not for their injury or for any wrongful purpose. I will not give a deadly drug to anyone, though it be asked of me, nor will I lead the way in such counsel; and likewise I will not give a woman a pessary to procure abortion. But I will keep my life and my art in purity and holiness. Whatsoever house I enter, I will enter for the benefit of the sick, refraining from all voluntary wrongdoing and corruption, especially seduction of male or female, bond or free. Whatsoever things I see or hear concerning the life of men, in my attendance on the sick or apart from my attendance, which ought not to be blabbed abroad, I will keep silence on them, counting such things to be as religious secrets.

"If I fulfil this oath and confound it not, be it mine to enjoy life and art alike, with good repute among all men for all time to come; but may the contrary befall me if I transgress and violate my oath."

On Wounds of the Head

This work gives one of the best presentations of surgical knowledge and procedure of the *Hippocratic Collection*. The general line of treatment, though not always in accord with modern practice, bespeaks great ingenuity, vast experience, and a careful collation of cases. It is impossible to give the book as a whole, and we must be content with the description of the operation of trephining.

"When it is necessary to trepan a patient you must make up your mind and judge as follows. If you have taken charge of the case from the first, you must not trepan the bone down to the membrane at once, for it is not desirable that the membrane should be long exposed to injury, being uncovered by the bone, lest it should end by becoming rotten and fungous. There is also another danger, that you may wound the membrane with the saw during the operation, if you try to remove the bone immediately by trepanning down to the membrane. Therefore, when the bone is almost entirely sawn through, and is already loose, you should cease trepanning and allow the bone to come away of itself. For no mischief will supervene in the bone when thus sawn through without

entirely completing the operation, the remainder being so thin. The rest of the treatment must be carried out as seems to suit the wound.

"While trepanning you must often remove the trepan, because of the heat it imparts to the bone, and dip it in cold water. For the trepan, becoming itself heated by the circular motion and heating and drying the bone, burns it and causes a greater piece of the bone round the sawing to come away than would otherwise do so. And if you wish to saw immediately down to the membrane and then take away the bone, in that case also you must often remove the trepan and dip it in the cold water.

"But if you do not take charge of the case from the first, but take up the treatment later from another, you must immediately saw the bone to the membrane with a serrated trepan, frequently removing the trepan and examining with the probe and otherwise all round along the track of the trepan. For the bone is sawn through much more quickly if it is already suppurating and penetrated by the pus, and the bone often happens to be deficient in depth, especially if the wound be in that part of the head where the bone is rather thin than thick. Therefore, you must be on your guard that you may not apply the trepan at random, but you must always fix it in the bone where it appears to be thickest, frequently making an examination trying to raise the bone by moving it. And after removing it you must continue the treatment as may appear advantageous to the wound according to circumstances.

"If, having taken charge of the case from the beginning, you wish immediately to saw through the bone and remove it from the membrance, you must in the same way frequently examine with the probe the track of the saw, and fix it always in the thickest part of the bone and seek to remove it by moving it about. But if you use a perforating trepan, you must not go down to the membrane . . . but you must leave a thin scale of the bone, as has been described in the account of the process of trepanning."

The Aphorisms is the most famous book with which the name of Hippocrates is associated. It is probably the greatest medical work ever written, and is perhaps of all the collection the one most likely to be really the work of Hippocrates himself. It consists of a series of very brief generalisations; many of these have been amply confirmed by the clinical experience of later ages, some have passed into medical commonplaces, yet others have become popular proverbs. The whole appearance of the work suggests that it is the production of an aged physician reflecting on the experience of a lifetime. Among modern medical writings its closest analogue is perhaps the great *Commentary* of William Heberden the elder (1710–1801), which was commenced by him after the age of 70, occupied the last twenty years of his life, contained a summary of the whole of his vast experience, and was published by his son after his death. If the *Aphorisms* is similarly a work of the old age of Hippocrates, it may be dated about 380 B.C. The book is of such a character that a few extracts give a good idea of its nature.

"Life is short and Art is long; the crisis is fleeting, experiment risky, decision difficult. Not only must the physician be ready to do his duty, but the patient, the attendants, and external circumstances must aid in the cure.

"Old persons bear fasting most easily, next adults, and young people least—least of all children—and least of these again any who may be particularly full of energy.

"If in any illness sleep does harm, it is a deadly symptom; but if sleep does good it is not deadly.

"Whenever sleep puts an end to delirium, it is a good sign.

"Spontaneous weariness indicates disease.

"If people have a painful affection in any part of the body, and yet do not for the most part feel any pain, there is mental disorder.

"Fever following a convulsion is better than a convulsion following a fever.

"To eat heartily after a long illness without putting on flesh is a bad sign.

"Any food or drink which is slightly inferior in itself, but more pleasant, should be preferred to those which are better in themselves, but less pleasant.

"Old people have for the most part fewer illnesses than the young, but if any illness becomes chronic with them, they generally carry it with them to the grave.

"Those who have severe fainting fits die suddenly without apparent cause.

"Those who are naturally very fat are more liable to sudden death than the thin.

"The dry seasons of the year are more healthy than the rainy and attended by less mortality.

"Cold sweats in conjunction with an acute fever indicate death, but with a milder fever only prolonged sickness.

"Convulsions supervening on a wound are deadly.

"Those attacked by tetanus either die within four days, or if they get through these they recover.

"Phthisis comes on mostly from 18 to 35 years of age.

"If, after an attack of quinsy, the affection turns upon the lungs the patient dies in seven days; if he gets through these the lungs become purulent.

"It is fatal for a woman in pregnancy to be attacked by one of the acute diseases.

"In cases of jaundice induration of the liver is a bad sign.

"We should observe the appearance of the eyes in sleep; if any of the white show through the eyelids when closing, this is a bad sign and very dangerous, unless it be due to diarrhœa or taking a purgative.

"An attack of delirium with laughter is less dangerous than with despondency.

"Apoplexy is commonest between the ages of 40 and 60.

"Spitting of pus after blood is a bad symptom.

"If you give the same nutriment to a patient in a fever and to a person in health, the patient's disease is aggravated by what adds strength to the healthy man."

The Prognostics.

Immense and, as some may think, overwhelming importance is attached by the Hippocratic writings to the art of prognosis. The work to which the title *Prognostics* is attached represents a very lofty standard of practice, but we have only space to quote a single typical and famous passage. It is a description of the signs of death to which the name of *Hippocratic facies* has become attached. It is imitated by Shakespeare in his description of the death of Falstaff in *Henry V.*

"You should observe thus in acute diseases: first, the countenance of the patient, if it be like those of persons in health, and especially, if it be like itself, for this is best of all. But the opposite are the worst, such as these—a sharp nose, hollow eyes, collapsed temples, the ears cold, contracted, and their lobes turned out; the skin about the forehead rough, stretched and parched; the colour of the face greenish, dusky, livid or leaden.

"If the countenance be such at the beginning of the disease, and if this cannot be accounted for by the symptoms, inquiry must be made whether the patient has been sleepless, whether his bowels have been very loose, and whether he has wanted food, and if any of these be confessed the danger is to be reckoned so far the less, and it will become obvious in a day and night whether or no the appearance come of these. But if none such cause exist, and if the symptoms do not subside in this time, be it known for certain that death is nigh."

Bridge.

THE two previous articles have been practically entirely given up to discussions on bidding, although it was pointed out that the actual play of the cards was almost equally important. This is the reason that this fortnight's space is confined to the play. It is, of course, impossible to deal with the entire subject completely at one sitting, so only the initial lead and the immediate after play will be dealt with in detail.

In a no trump declaration the opponents usually try to establish a long suit, whereas in a trump declaration this mode of attack is useless, and the opponents either made quick tricks, giving the declarer no time to discard, or else play short suits in the hope of making an otherwise useless trump. As the two conditions are so absolutely different, they will be dealt with separately, commencing with the no trump bid.

This can be divided into two groups—when the leader's partner has declared a suit and when he has not. When he has not called, the leader must decide which suit and which one of the suit to lead in order to make as many as possible in that suit. In general, the leader should open with his longest suit, except in the rare case when that suit happens to have been called by the opposition. Occasionally, he has two long suits, in which case the stronger should be led, unless it has been overcalled, when it is usually more profitable to open with the other. The Ace, King of a short suit may often justifiably be opened with the King to inform leader's partner that he has a re-entry in that suit.

Having decided which suit to open, the slogan "Fourth highest of longest suit" echoes often so loudly that one forgets there are times when it is not wise. Obvious exceptions occur. The cursed player who sits passively with A, K, Q, *, *, * of clubs over a no trump declaration knows full well the lead is the Ace. Neglecting these freakish distributions, a safe generalisation is that with fewer than three honours, the correct lead is the fourth highest. If the three honours are touching, lead the highest. If two of the honours are touching, lead the highest, except with a holding of A, K, 10, *, when it is best to lead the fourth highest. Three tricks are more likely to be made in this way than by leading the Ace or King. The lead from A, Q, 10, * is the fourth highest. The lead from a sequence such as J, 10, 9, 8, or J, 10, 9, 3, and from J, 10, 8, 7 is the Knave. Two examples will illustrate the application of these principles. The leader has A, K, 9, 8, 3. The correct lead is the 8, whether or not leader has a

re-entry, because in this way—and in no other—does he stand a good chance of making four tricks in that suit. If leader has A, K, J, *, *, the Ace would be the correct lead, because the initial lead of an Ace conventionally demands the play of the partner's highest card which, if it was the Queen, would allow the leader to continue in the hope of making five tricks. If the Queen did not fall, and neither was in dummy, it would be better to try another suit and wait for one's partner to lead the suit through the declarer.

If the leader's partner has declared a suit, then the leader has to decide if he ought to lead his partner's suit or not and should he decide to lead it, how to open it. Partner's suit should be opened unless the leader has A, K, Q of a suit or K, Q, J or K, Q, 10 and a re-entry. There are other occasions as when the leader has bid and his partner has supported this bid, as well as bidding a suit himself. If the leader has a singleton of his partner's suit it is often better to try to establish his own long suit. If none of these conditions arises, the leader must open his partner's suit. The correct way to do this is dependent on, of course, his holding, and on whether the suit call was overbid by dummy or declarer. When dummy overcalled the bid, the lead should be the highest. When declarer was the one to overbid the suit call, leader should lead his highest unless the suit be headed by A, K or Q with two others, or the J with three others, when the lowest should be led. If this was fully recognised as the correct method, more games would be saved against no trumps. Unfortunately, the leader's partner thinks that the highest is always led, and consequently fails to return the lead. An example will suffice. Z bids one no trump, A and Y pass, B bids two spades, Z two no trumps, and all pass. A, the leader, has K, *, *, Y two small ones, B has A, J, 10, *, * and Z has Q, *, *. If the King is led, Z has a guard; if a small one is led Z has no guard.

Although the lead against a trump declaration is in many ways different from against the no trump declaration, there are several conditions which are the same. The selection of when, and when not, to lead partner's suit is practically the same. A combination of A, K, Q, A, K, J, or K, Q, J certainly justifies leading that suit, and even A, K in many circumstances justifies the lead of the King. The one essential difference is when the leader has a singleton of his partner's suit. In no trumps it is often wiser not to lead it; in a suit declaration the reverse is true. The lead of a singleton is always a dangerous proceeding; often it will save game, but practically an equal number of times it will make game simpler for the declarer. Although no hard and fast rules can be laid down, it may be stated that a singleton should not be led in preference to a strong holding in another suit unless the singleton is in the suit already called by the leader's partner.

When leader's partner has not called, the original lead must be made with the idea of making quick tricks. Strength is the chief factor in trump declarations as opposed to length in no trumps. Tenaces (K, J, 10 or A, Q, J) should be avoided unless called by one's partner. Bad leads include those from doubletons, singleton Kings and from weakness, and practically always leading into trumps unless the leader has great strength in trumps. This last procedure lingers from the day of whist. A useful proceeding is to have a look at dummy by leading the King from an A, K combination, and then decide on future tactics. The lead from Ace and three or four more small ones is always the Ace. It is the best as well as the conventional lead and pays best in the long run.

Guy's Hospital Christian Union.

THE Annual Service for Students will be held on Thursday, March 17th, at 1.30 p.m., in the Hospital Chapel. These services were revived last year, and it might be as well to say that they are open to all Students of the Hospital, whether or no they support the normal activities of the Christian Union.

The service will be taken by the Chaplain and Canon T. W. Pym will give the address.

During the week-end March 26th and 27th, there will be a conference for Medical Students held at Horndon Priory, Stanford-le-Hope, Essex. The speakers will be Dr. William Brown on "Religion and Health" (a consideration of the nature of sin from the pathological point of view), and the Rev. C. Franklin Angus on "The Character of our Lord" and "The Good Physician." If any who are interested will leave a note in the Colonnade addressed to F. H. Stevenson, the Hon. Secretary, he will be very glad to give all further particulars.

Reviews.

A Practical Handbook of Midwifery and Gynæcology. By W. F. Theodore Hauldin. Published by Faber & Gwyer, Ltd. (The Scientific Press. 1926. Pages 316. 36 Figs. *Price* 10*s.* 6*d.*

THIS book fills its place admirably among the synopses of the various subjects, which are written mainly for undergraduates. The subject matter is well arranged and both subjects are dealt with fully, in spite of the small size of the book. The inclusion of both subjects in one volume is a great advantage, and helps to break down the tendency to keep them in watertight compartments. From the section on "Complications of Puerperium" the author goes on to deal with the more purely gynæcological conditions.

There is some lack of proportion in the amount of space devoted to the various conditions. For example, two pages are devoted to the almost obsolete operations of pubiotomy and symphysiotomy. When there are only 36 illustrations, the inclusion of Roberts' pelvis, which is extremely rare, seems unnecessary.

Apart from a few minor points such as these, the book is excellent, and will be found most useful for rapid revision by the student preparing for an examination or by the busy general practitioner.

Diseases of the Heart and Lungs: A Handbook for Nurses. By A. I. G. McLaughlin. Published by Messrs. Faber & Gwyer, Ltd. 1st Edition. *Price* 4*s.* 6*d.*

THIS is a most straightforward and helpful book for Nurses who are nursing medical cases. It deals concisely with the different aspects of heart and lung disease, and gives full accounts of the more important conditions without including confusing items of knowledge which only concern the medical man. The writer seems to understand the needs of probationer nurses and gives, besides the salient points in symptoms and nursing treatment of the various diseases, much interesting information on modern methods of treatment and investigation used in the medical wards of hospitals to-day; for example, the induction of artificial pneumothorax and the serum treatment of lobar pneumonia. Sisters and Nurses should find this book of great interest and value.

Hints to Probationer Nurses in Mental Hospitals. 2nd Edition. Published by Messrs. H. K. Lewis & Co., Ltd. *Price* 1*s.* 6*d.*

THIS book will be of comparatively little use to Nurses in this Hospital in so far as their duties here are concerned. Or, perhaps, it would be fairer to say that unless the Nurse happens to be in the Eye Ward at a moment when a patient becomes maniac, it will probably be of little use.

The book is divided into two sections. The first is devoted to "Hints to Probationers in Mental Wards," the second to "Psychology."

The first part is clearly written, and should prove valuable. The second part is intended to familiarise the Nurse with those points of psychology which throw light on mental aberration. The headings of the subdivisions of this second part are formal, and the definitions given are not particularly helpful. Thus, we are not illuminated by the statement that "an instinct may be defined as an hereditary faculty which enables its possessor without previous experience to perceive and to pay attention to objects of a certain class"; neither are we edified by the remarks that emotions may be described as the "tendencies to experience a certain 'tone of feeling.'"

To an almost completely uneducated and unreflective person, this second edition of the work might prove informative. It is in the last part, however, which contains many useful hints and comments on the handling of the insane that the value of the book resides.

Aids to Pathology. By Harry Campbell. Published by Messrs. Bailliere, Tindall & Cox. 5th Edition. *Price* 4*s.* 6*d.*

THIS little book, probably the best within its scope and compass, of the "Aids" series, has deservedly passed into a fifth edition. It consists now of 250 closely written pages, containing many paragraphs in small print.

New material has been added in many places, notably in chapters dealing with blood immunity, tumours, vitamines, endocrines, spleen, lymph glands and diabetes.

Dr. Campbell has a gift for writing interestingly and informatively. Unlike most medical writers, he has a flair for the thing the student wants to know, which he puts compactly and clearly, interleaving his text with excerpts from classical writers. Before taking an examination in pathology three years ago, the reviewer was advised to read this book in conjunction with the more ponderous volumes of McCallum and Dixon. When confronted with the questions he found he could produce answers which satisfied the examiners (who were not unexacting) from the information gleaned from this book alone. The beginner in pathology sometimes finds it difficult to distinguish the wood from the trees. He will find himself most effectively assisted in this process by this work, by which he will also be entertained and amused.

The only criticism that could be advanced is that the classifications by which each subject is

introduced are not always consistent with the text which follows. To give one example, a glioma is stated in the classification of tumours on p. 77 to be a mesodermal growth—which, of course, it is not.

On p. 78 it is correctly stated to be derived from the primitive neuro-ectodermal cell, which is epiblastic. It is to be regretted that Dr. Campbell has retained in the middle of p. 91 an utterly unintelligible sentence about the cælom theory.

Correspondence.

Advertisement Extraordinary!

Philadelphia, 1927

Yes, Cupid Is a Little Dumb-bell
Too Bad, Though, Isn't It?

DEAR SIR,—When the Fight starts, Cupid jumps out of the window.

What next?

It should be the Doctor, but generally it is the Lawyer.

The Conjugal Contract is about the most important deal ever pulled off, and usually Cupid is the promoter.

And he's a perfect Dumb-bell.

Divorce! Divorce! Divorce!

The Physician is often the safest councellor in impending cases. He is peculiarly qualified to give the abnormally selfish husband some mighty useful information that may make everything smooth and lovely.

Of course, if it's an instance of a wholly unreasonable woman, the case is different. Nothing can be done.

Send for

"DISORDERS OF THE SEXUAL FUNCTION"
By —— ——, M.D., New York
335 Octavo Pages Handsome Cloth Binding
Second Revised Edition
Price, Post Free, 12*s.* 8*d.*

Use the enclosed card.

Yours very truly,

—— ——

(The above specimen of American advertisement recently received seems worthy of publication as an example of trans-Atlantic ultra "pep."—Ed.

A Jumble Sale in the Massage Department.

ON March 4th—a truly memorable day in the history of the Department—a Jumble Sale was held to raise funds for the Massage Department. The afternoon prior to the great event was not without incident. An air of unrest prevailed throughout the Department, students gathered together in groups talking agitatedly watching the Staff in the difficult and perplexing task of sorting out and pricing garments—known and unknown—pouncing upon the latest creation from Paris, rescuing from the débris a stray pair of plus fours with rustic bottoms, sacrificed to the God of Rummage.

The great day arrived, and in the Treatment Room was a seething mass of perspiring humanity, with boney elbows and large feet, which pursued you through the jungle of stalls, tables and chairs until you reached the haven of some distant corner.

Sister Massage, warily ensconced upon a high stool, excelled as Chancellor of the Exchequer, in between times bestowing her undivided attention upon the excited throng, counselling would-be bargain hunters, encouraging stall holders to further efforts, and enlightening "Rafflers" in the art of "rooking"—albeit jovially. Above the din of the hustling crowd the voices of the students yelled: "Houp-la!" "Aunt Sally this way!" and in some obscure corner a fortune teller quietly told the story of monies lost on recent speculative bargain lots.

Apart from the amusement derived from such a sale, we realise how much it is appreciated by the poorer members of the community, and we are extremely grateful to those who so generously gave and helped to make the sale such a success. The Sale realised a sum of £108 odd.

M. K. T.

Sport.

Rugby.

Inter-Hospital Cup Competition
2nd Round.
Guy's v. St. Thomas's.

ST. THOMAS'S, the holders, were our opponents on Tuesday, February 15th, 1927, at Richmond, and for once both sides were able to put full strength into the field. A glorious encounter ensued, and neither victors nor vanquished ceased their strenuous efforts till the final whistle went.

First blood is a great stimulant. Within three or four minutes of the start Preen made an opening, on the line practically, for Garland to score the first try of the series that the afternoon brought him. J. Durr converted, and our confidence rose, as we had 5 points on the board, to be increased to 8 almost immediately, as the stand-off half back sent Lewis over in the left corner. The attempt at conversion was charged, or rather the ball touched, in flight. For twenty minutes our forwards held the upper hand. There was vigour and more dash in their play. It is more than difficult to single out men when the whole eight were in tip-top form. Guy's pack has become first class. Now Thomas's took a hand, A. K. Miller putting in good work. He was not well supported, but his brother on the wing did his best to help, though his chances were extremely limited. Durr had the ball jolted from him as he was crossing for a try and Guy's subsequently set up a delightful passing bout. No direct score resulted, though Garland, picking up in the loose, found a way over for his second success.

Magnificent was the passing by more than half the side which ended with Cameron scoring.

The second half opened with Thomas's forwards much more virile and the game was more in our quarter. Here Cooper took a drop, but nothing came of it. Now came Thomas's real attack. The ball was passed right out to the left and then handed back to the extreme right, Purvis being forced to kick to touch by the flag. The line out brought a try to O'Malley, and with a wonderful kick Jerram steered the ball over the bar.

The tackling of both teams was good, and both full backs were safe and found touch with lengthy kicks. Garland had a drop; Lewis knocked the corner flag over. Then Tnomas's were off down field again. Popplewell and the forwards rushed the play back to half way. Cameron dashed clear, handed to Lewis, and Garland, being up as usual, received for his third try. A fine kick by Durr increased our lead to 19–5.

Archer was laid out, but soon resumed and headed a rush which put us defending again. Thomas's threw themselves at the line, but defence held till Robertson, their fly half, dropped a goal. Both teams resumed with as much energy as ever. A. K. Miller again showed his excellence, and then, when the scoring seemed all over, Garland thought the total inadequate and scored his fourth try of the afternoon with a very clever elusive run.

Result—Guy's 2 goals 4 tries (22 points); St. Thomas's 1 goal and 1 dropped goal (9 points).

It was the best Cup Tie played for many a day. Both teams out for points all the time. Open and vigorous. Full of good sporting incidents, and refereed exactly in the right spirit by Mr. H. L. Hollis. In congratulating Guy's, may one also congratulate St. Thomas's. They lost the lead early, but they never lost their pluck. T. O. Garland's display was outstanding.

Guy's Team—V. G. Boyle; G. J. Clarke, F. H. B. Spence, F. J. Wilkinson, A. J. D. Lewis; T. O. Garland, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. Durr, J. W. Schabort, J. R. F. Popplewell, A. Simpson-Smith, J. H. Cullinan, T. Morgan.

Semi-Final.
Guy's v. St. Mary's.

ON February 24th, a miserably dark and wet afternoon, it was our turn to meet St. Mary's. The surroundings were gloomy and ourselves slightly depressed, because we had to take the field without G. G. Cameron (capt.), J. Durr, J. W. Schabort and A. Simpson-Smith, and one may now say that W. H. Myburgh insisted on playing though his shoulder was far from sound. The part was well padded; still, it was extremely gallant of Myburgh to turn out. The Hospital are grateful to him for his pluck and glad that his injury did not again assert itself, though the play was in all conscience hard enough to upset both fit and unfit.

At first St. Mary's rather bottled us up. They broke very quickly and kept to the ball with tenacity. A lofty kick and rush was a favourite method of attack. Scott made a mark on the half way line and took, with a following wind, a long shot; nothing came of it. Again St. Mary's came strongly and, on the line practically a scrummage looked ominous. Luckily we escaped and the

forwards settled down to it, though St. Mary's were still very fast on the ball. Getting gradually, after 20 minutes' play, into a position of attack, Garland got an opening, passed to Preen, and received again to ground by the posts, Radford converting. Rocyn-Jones, the St. Mary's International full back, was now lame and, although he kicked splendidly, his pace was handicapped. The ball became very hard to hold, yet Jones and Boyle never missed fielding. Morgan headed a good dribble and Garland started a blind side movement. Things were coming our way more. Only inches short was Garland held. Then a maul favoured St. Mary's, Cussen punting for safety. Malone got offside and gave us a momentary shiver. Then Clarke let Rocyn-Jones pass him in a run up field, but the movement soon ended.

Now, the interval over, the wind and rain were behind us, yet St. Mary's rushed to our line. Dymond, Scott and Manley were good men ; they played fine football. But Boyle stoutly kept his line intact time and time again. Lewis now came away dribbling splendidly, only Rocyn-Jones—and he lame—to pass. Gently Lewis kicked and Jones, who does not lack courage, cleared at once. Lewis should have lammed into the ball and sped on for the line. Cussen, the Irish International, had but few chances. The ball did not come his way much and was so difficult to hold. A bout of passing though, right across from left to the right, left Clarke in possession, to score a good try which Radford very cleverly goaled.

Our next try was typical of Garland and Preen. The latter ran to the reverse side and Garland's reverse eye picked him up. The pass, neatly given and received, sent the ball on surely right out to Lewis, who ran well and scored. Radford's excellent kick was short. We nearly got over once again, but Seeley prevented the try. Seeley was wonderfully good, fast in defence and attack ; it would be interesting to see him in action on a dry day. Another offside or two against us and the game finished with St. Mary's going very strongly, with their forwards still in full cry and striving with might and main till the last kick.

Result—Guy's 2 goals 1 try (13 points) ; St. Mary's 0.

Guy's Team—V. G. Boyle ; G. J. Clarke, F. T. Wilkinson, F. H. B. Spence, A. J. D. Lewis ; T. O. Garland, V. R. Preen ; W. H. Myburgh, J. R. F. Popplewell, T. Morgan, J. H. Cullinan, C. D. Malone, L. Brown, J. D. Radford, D. S. Clogg.

The players did exceedingly well. It was not a day for tall scoring, but 80 minutes hard grind was the lot of all. It would be well if Malone kept onside, though one can admire his spirit. Morgan wants to gallop—*all out*. That good footwork of his will be so helped by more abandon at the finish. To Myburgh, who led them and was so well backed up by Popplewell and Morgan, as well as the whole team, our hearty congratulations. J. Radford played a good sound game ; his kicking is invaluable.

Guy's v. Plymouth Albion.

WHETHER it is their jerseys, or whatever the real reason, Plymouth always appear to be the heaviest pack we ever come up against. J. Durr, A. Simpson-Smith, T. O. Garland and T. Morgan were for a variety of reasons unable to play.

The substitutes, however, played exceedingly well, Radford in particular. The visiting side were very slow in starting, probably due to different surroundings. Quite early we established a footing in their 25 and passing left the ball with Clarke, who went full plug for a try. He just failed. The tackling of our men was not quite so sure as usual, yet the forwards, playing against heavy metal, were again doing mighty things. Cameron's example pervades the pack. The heeling of Myburgh, aided by a little more weight from the second row, got the ball back to Jones, Preen carried on, then Spence shot by his man very cleverly and passed to Clarke, who went over like a thunderbolt. There is no lack of determination about this runner. Excellent was Dyer of Plymouth at full back. Strong of build and a long kick, he has been tried for England. As good, but cast in lighter mould, is Boyle. His display was polished and of high class. Still Guy's attacked, and Preen sent up a high kick. Spence was on it and fell with the ball for a try, which Radfold converted in good style. With half time approaching, Stanbury—of England—showed us several times he is a great forward. Hanley, also of England, a fast forward who plays the winging game, got right away to Boyle and handed then to Daw ; the resulting try was not majorised. Jago was only half tackled by Cullinan and ran very close, the ball being passed from back to back, and Granger punted over Boyle, but Clarke saved an almost certain try.

The second half opened with Plymouth pressing. We kept them out while the forwards got their second wind, though Stanbury was a source of anxiety. Before long he actually got over, after Hanley had assisted in the preliminaries. Undoubtedly, these two forwards were far and away the best of the Plymouth men, with Dyer supreme

in his department. The play was delayed 10 minutes from the resumption, Myburgh having hurt his shoulder. This gallant player has never left the field before in any game he has played for the Hospital and only for the sake of Thursday's important game and the strong persuasion of Dr. Marshall, who so kindly looked after him, did he give up resuming in this game. Yet the seven remaining forwards held their own, though less did we see of the ball. Then came a dramatic episode. The match was exciting, the scores close, our visitors full of anxiety, their friends in the stand angry with the referee, our players, their players and themselves. When Spence intercepted and was clear—Dyer only in the path—Clarke sailed up on the right. Spence gave over and Clarke ran hard and cleverly, though Pearse tried his utmost to stop him, to ground right beneath the bar for Radford to convert.

Result—Guy's 2 goals 1 try (13 points); Plymouth 2 tries (6 points).

An extraordinary happening was an easy place kick from a penalty taken by Stanbury. The goal was missed. A second kick allowed because apparently one of our men moved. Stanbury took little pains over the second attempt—it went wider still!

Guy's Team—V. G. Boyle; G. J. Clarke, F. H. B. Spence, F. J. Wilkinson, A. J. D. Lewis; W. D. G. Jones, V. R. Preen; G. G. Cameron, W. H. Myburgh, J. R. F. Popplewell, J. W. Schabort, L. Brown, J. H. Cullinan, J. van Niekert, C. Radford.

F. H. B. Spence played the best game he has yet taken part in. The backs, as a whole, played well. The marking perhaps not so keen, but Thursday's game was no doubt borne in mind. Cullinan must get onside—and keep there. Brown wants more "ginger" and to go "all out." The whole XV want to keep in perfect condition. Physical fitness in Cup Ties is worth many points.

Guy's v. Birkenhead Park.

AT Honor Oak Park, on Saturday, February 26th, this excellent team from the North came to us. Why does it always rain when they come and so spoil a very attractive fixture?

H. M. Locke of England, J. R. Patterson of Scotland and De Villiers of South Africa were prevented from playing. On our own side, the St. Mary's match and the claims of a team of Dominion Students playing at Twickenham so depleted Guy's that only four first team men were available. Yet J. R. F. Popplewell captained a side that played like veterans. Had a little more pace been available and R. D. Green the Park full back been less efficient, a different story would ensue. Green played grandly, so did A. G. Johnson—young, slight and just come among us. He tackled like a lion and went down and at these big men from Birkenhead Park without a moment's hesitation.

It was a bad day for football, so wet and muddy. Yet none could quarrel with the fare provided. Our forwards put in some very hard work and soon forced a touch down. Then Spence dribbled over and forced another. Green now showed his metal—and jolly good he was—but once Jones after a splendid dribble got Green before a clearance was possible. Robinson, a very promising player, put in some very neat work. Brown was also at this period performing valiant service. All the forwards did well, especially Malone and Popplewell, by this time assuming the appearance of a black man; in fact, if this is a sample of Guy's future pack we are well satisfied. R. Stapleton turned the tide; magnificently he ran, twice from his own 25, and though the actual onslaught was checked, another spurt on the right forced Brown to kick dead. The scrum that followed led to a blind side movement, cleverly executed, and Strong, the Oxford Blue, scored. W. D. G. Jones, who was playing exceedingly well, was now badly kicked. He resumed at once and dashed for the line. A brave effort, indeed. Half time came and Jones, whose injury appeared severe, retired.

The second half opened with a penalty, which Radford narrowly missed goaling. Again Stapleton showed his pace; Wainwright came up to miss the pass. Good fortune for us. Spence was now fly half and Radford threequarter. The seven forwards were doing well, and twice we were over only to miss the touch. Away again down the left went Wainwright, when Johnson came out of the blue to bring off a magnificent tackle. Again we missed the touch after Lewis had cleverly dribbled. Through hearty defence work Spence was now indistinguishable, yet his play was invaluable. The elements could not prevent the game being fast. From end to end the game swung; the players, with energy scarcely abating, showed tremendous keenness through the mud. Stapleton, Wainwright, Strong and Richardson came down in force—a forward pass saved us. But a line out and a drop over the goal line by Paxton-Harding completed the Park's last effort. Clarke was almost clear in the last minute, but the game ended with Birkenhead Park winners by 2 tries to 0.

Guy's Team—A. G. Johnson; G. J. Clarke, A. J. D. Lewis, F. H. B. Spence, T. G. Robinson; J. Barnes, W. D. G. Jones; J. R. F. Popplewell,

C. D. Malone, L. Brown, J. C. T. Tregarthen, J. Radford, J. H. Richmond, D. S. Clogg, J. J. Van Niekerk.

All did splendidly—Barnes, Johnson and F. H. B. Spence, together with the captain, J. R. F. Popplewell, were great in defence. Every man was a trier. A fine side was held in check. Guy's reserves will never let the Hospital down.

W. H. Taylor, the old Cornish captain and Guy's player, was on the line much regretting that his damaged knee will not allow him to turn out again. After leaving us he played regularly for Birkenhead Park and Cheshire.

Association.

Inter-Hospital Cup.

Semi-Final.

Guy's v. Royal Dental Hospital.

THIS game was played on Bart.'s ground on February 19th, and resulted in a handsome and well deserved win for Guy's. The ground was in excellent condition and play was maintained at a good pace throughout.

The first half came to an end without either side having scored, for although our team looked the better side, the Royal Dental Hospital, by persistent long kicking, kept the forwards from finishing successfully. However, Small had put in a fine shot, while Ashling also had nearly scored; our opponents, too, however, had come close to scoring.

The second half opened with Guy's pressing, and shortly after Ashling put them ahead with a beautiful first-time shot, which travelled all along the ground. Five minutes later a clever piece of combination between Smallshaw and Williams led to a second goal. The former, bringing the ball up the field, drew the defence across on to the right wing, and then pushed a perfect pass through to Williams, who had been left unmarked in the centre. He took the ball on the move and shot straightaway, hopelessly beating the goalkeeper.

Ashling then scored again with a good shot, Williams added another, and Evans brought the total to 5, making Guy's easy victors.

The team played much better than the previous Saturday, the combination having improved. The defence as a whole was sound, but an occasional serious lapse would occur at a critical moment. The forwards have the capabilities of moving as a line with considerable dash, but unfortunately the brains of the five men are not used to equal degrees. Goals do not come for the asking, but only as a result of hard working in conjunction with feet—and other people's feet, too.

It still remains to win the final, for which still greater efforts will no doubt be needed.

Guy's Team: W. D. P. Evans; J. White, D. E. C. Robertson; E. Fulford, D. B. Smallshaw (capt.), H. Ginn; L. Ashling, E. E. Evans, L. S. Williams, A. M. Cantor, J. Small.

Final.

Guy's v. St. Thomas's

THE final of the Inter-Hospital Cup was played at the Crystal Palace on Wednesday, March 2nd, before a surprisingly large crowd, and resulted in a fine victory for Guy's by 4–1.

Guy's won the toss and chose to play against a strong gusty wind, which blew straight down the field.

St. Thomas's were quickly on the attack and very early gave our defence some anxiety. Guy's, however, relieved the pressure and set up an attack in which Small was prominent—a little too elaborate passing robbed Guy's of a chance to go through. After about twenty minutes' play, St. Thomas's attacked strongly and put in a tame shot, but Evans, coming out of goal, failed to clear the ball properly and before he could recover his position MacLean, St. Thomas's, easily scored with a low ground shot.

After this, Guy's played up strongly, but with the strong wind in their faces they could not get the ball far away from their own penalty area, and St. Thomas's were unlucky not to score with a fast shot that hit the side post and came back into play. From the rebound Guy's took the ball right through the St. Thomas's defence for Small to score with a really fast oblique shot that left the goalkeeper helpless.

A few minutes later the same player almost repeated his effort, the ball going a few inches outside the post travelling at a tremendous speed.

Guy's were playing with a good deal of spirit now, and the raids on their opponents' goal always threatened danger. Williams got clean through, only to be brought down from behind. From the resulting penalty kick he put the ball straight at the goalkeeper, and half time arrived with the score 1–1.

So far, St. Thomas's had pressed us heavily, but after the interval Guy's settled down in their opponent's half—and stayed there. Williams opened up the game well and was well backed up by all the forwards, who went hard for goal whenever the opportunity offered itself. The lead came through Small, who scored with a beautiful shot, the wind helping to deceive the goalkeeper. Still attacking hard, Guy's added to their score through

E. E. Evans, who gave the goalkeeper no chance of saving the shot. This was a good goal, scored from just outside the penalty area.

The fourth goal was the result of a very pretty movement started by Williams. Hemmed in by three opponents he gave Small a delightful through pass and, from a well judged centre, Ashling scored easily. And so the game closed, Guy's having once more won the "Cup."

It would be quite invidious to pick out individuals for special mention for we venture to think that it was the best balanced side Guy's have had since the war. Not so good individually as in 1919–20, but with every man doing his share.

All through the game Guy's were playing like winners, and if the defence was not as polished as the forward line it gave the St. Thomas's forwards very little room to move in, and at the same time covered the goal thoroughly; Evans had not more than half-a-dozen shots to deal with.

White, on the right, and Ginn, on the left, were both in their very best form, but the whole defence positioned themselves well, and danger mostly threatened at the throw-in, when the opposing inside forwards were not marked properly. This is an old failing, which must be looked to in the future. Of the forwards, Williams was his old self and led a well-balanced line with dash and skill; some of his passes out to the wings were first-class, notably that leading to the second goal. Evans, at inside right, suffering from a bad cold, was really good in attack. He is a clever forward, heavy, and with a deceptive swerve; as centre forward he should be no unworthy successor to Williams next season.

Small was perhaps the surprise of the match. He played excellently and is the most promising left winger Guy's have had for years.

St. Thomas's fought hard up to the last minute. It was hard luck for them to have to play with a re-arranged forward line. Griffin, at inside left, was their best forward, and with more support might have scored at least two goals. Hosworthy, in goal, played very well, and was not to blame for the four goals. It was a splendid game, played as cup finals should be played—cleanly and with plenty of good, honest shoulder charging.

After the match, in the unavoidable absence of Mr. Fagge, Dr. J. Fawcett very kindly presented the Cup to Guy's. His short speech expressed exactly what we felt—if Guy's could not win the "Cup" then we would have liked it to have gone to St. Thomas's.

Guy's Team—W. D. P. Evans; J. White, D. E. C. Robertson; E. Fulford, D. B. Smallshaw (capt.), H. Ginn; L. Ashling, E. E. Evans, L. S. Williams, A. M. Cantor, J. W. Small.

St. Thomas's Team—M. D. Hosworthy; W. N. Mascall, L. W. Lankester; F. J. Ashton, W. W. MacLean, C. W. Hope-Gill; R. W. Sabonadiere, L. C. Griffin (capt.), F. M. Sandford, E. A. Trim, C. B. Buckley.

Hockey.

1st XI v. R.M.A.

ON Wednesday, February 23rd, Guy's visited the R.M.A. at Woolwich and beat them 4–3 after a very even game. R.M.A. scored first and held the lead until a few minutes before half time, when Guy's equalised through Howitt. Guy's went off with a rush in the second half, Archer and Catchpole scoring. R.M.A. then added another, but Howitt scored again, giving Guy's the lead of 4–2. Just before the end the Academy added their third goal.

The ground was not in a condition for good hockey, but the side played quite well.

Possibly the worst fault is the non-shooting powers of the inside forwards.

Guy's Team—R. E. Smith; F. E. Camps, F. R. Hayward; R. A. Sykes, J. E. Willett, G. N. Carrell; E. T. Conybeare, C. N. Howitt, C. A. W. Archer, R. Catchpole, H. O. Lyne.

1st XI v. Mid-Surrey 2nd.

ON Saturday, February 26th, Guy's, with 10 men, did very well to beat a powerful Mid-Surrey II side.

The team played well all round, the combination of the forwards being decidedly better, the outsides getting in some excellent centres. The only back, and the halves showed keen marking in only letting one goal through.

Goal scorers for the Hospital were Archer (3), Curtis, Catchpole and Howitt.

Guy's Team—D. P. King; F. E. Camps; R. A. Sykes, J. E. Willett, G. N. Carrell; A. H. Curtis, C. N. Howitt, C. A. W. Archer, R. Catchpole, H. O. Lyne.

The 2nd XI have been very unlucky, four out of the last five matches being scratched.

Fencing.

THE return match with Oxford University was fought on Friday, February 25th, 1927, in the Gymnasium, and resulted in a win for Oxford by 20 defeats to 32.

C. S. A. Simey, the Oxford skipper was again undefeated in all three weapons. M. R. Holmes, of Oxford, was undefeated in Sabre, but was unfortunate enough to get 4 coupé doubles in Epée.

The Foil was, on the whole, good, the phrasing being well marked. S. A. Scorer was not at his best, and he only won one assault.

P. A. Gorer was the best in the Epée, obtaining two victories and one coupé double.

In Sabre, G. N. Wood came in at a moment's notice, and fought well. He won two contests, and should have won a third against Simey. The latter's fleche is practically unbeatable. S. A. Scorer was obviously off form, winning none

Result

Foil	*Losses*	*Epee*	*Losses*
C. H. Johnson	2	C. H. Johnson	3*
E. L. Monkhouse	2	P. A. Gorer	2*
P. A. Gorer	2	E. L. Monkhouse	4*
S. A. Scorer	3	T. B. Pitts	3*

* 1 coupé double

Sabre	*Losses*
C. H. Johnson	2
F. S. C. Pritchard	3
G. N. Wood	2
S. A. Scorer	4

Golfing Society.

OWING to the West Kent Golf course being covered with snow the February Competition had to be scratched.

This month the elements were again unkind to us. On the day arranged for our Competition the course was almost under water and extremely muddy, so that a postponement of play was made until Wednesday, March 23rd.

It is hoped that in spite of this postponement of date members of the Staff and others will do their best to come down and help to make a successful afternoon. E. C. DUFFETT, *Hon. Sec.*

Rifle Association.

THE Annual General Meeting of the above Association will be held on Monday, 21st March, in Class Room III, at 4.30 p.m.

Dr. Herbert French, M.D., F.R.C.P., President, in the Chair.

Agenda

1. Minutes.
2. Election of Officers.
3. Any Other Business.

CHAS. E. GALLAGHER, *Hon. Sec.*

Hospital Information, etc.

Pass List.

University of Cambridge.

Bachelor of Medicine.

R. W. Cuningham

3rd Examination for Medical Degrees.

Michaelmas Term, 1926

E. J. Greenwood W. S. Grove

M.D.

J. B. Hance

London School of Tropical Medicine.

Division of Tropical Medicine and Hygiene

The following passed the School Examination at the termination of the Session Oct, 1926–Feb., 1927 ;—

H. A. Young R. D. Gross H. Hoakai

Conjoint Board.

January, 1927

Surgery

J. C. Fast

Midwifery

K. G. Nerurkai K. S. V. Ayyar

Society of Apothecaries of London.

February, 1927

Surgery

*L. W. Rose

Midwifery

S. Slotar

* Has now completed the Examination

The Services.

R.A.M.C.

Capt. W. L. E. Reynolds to be Major (Prov.).

W. R. C. Spicer to be Lieut. on Prob.

Guy's Hospital Chapel.

SPECIAL SERVICES

SUNDAYS

Holy Communion : 7 and 8.45 a.m.

MATINS, 11 *a.m.*

Preachers :

Mar. 13 The Rev. A. G. Harris, M.A., Acting Chaplain.

Mar. 20 The Rev. P. E. Hawklsey, B.A., Acting Chaplain.

Mar. 27 The Rev. T. P. Stevens, Vicar of St. Matthew, Newington.

Apr. 3 The Rev. C. B. Roach, Priest-Vicar of Southwark Cathedral.

Apr. 10 The Rev. C. Jackson, Succentor of Southwark Cathedral.

Evensong and Sermon (in Cathedral), 6.30 p.m.

FRIDAYS

Compline, 8.15 p.m.

Addresses will be given as follows

Mar. 18 The Right Rev. The Lord Bishop of Woolwich, D.D.

Mar. 25 The Rev. N. P. Tower, M.A., Vicar of St. Peter, Clapham.

Apr. 1 The Rev. E. T. Finch, M.A., Vicar of All Hallows, Southwark.

Apr. 8 The Rev. Canon H. G. Monroe, M.A., Vicar of Wimbledon.

HOLY WEEK.

Holy Communion daily, 7 a.m.

Short Evening Prayers, 8.15 p.m.

Preachers

Mon. Apr. 11 The Rev. Canon Anthony Deane, M.A., Vicar of All Saints, Ennismore Gardens.

Tues. Apr. 12 The Ven. E. E. Holmes, B.D., Archdeacon of London.

Wed. Apr. 13 The Rev. W. N. Cork, B.A., Chaplain of the London Hospital.

MAUNDY THURSDAY (*April* 1)

Preparation for Easter Communion, 9.15 p.m.

GOOD FRIDAY (*April* 15)

Litany and The Liturgy, 7 a.m.

Short Service and Address, 10.30 a.m.

Three Hours' Service (12–3) in the Cathedral.

Evensong and Address, 8.15 p.m.

EASTER EVE (*April* 16)

Litany and The Liturgy, 7 a.m.

EASTER DAY

Holy Communion, 6.15 a.m.

Holy Communion, 7 a.m.

Holy Communion, 8.45 a.m.

Matins and Sermon, 11 a.m.

Evensong and Sermon (in Cathedral), 6.30 p.m.

The Celebration of Holy Communion will be continued daily at 7 a.m.

Suggestions for Lent Reading

One of the Four Gospels.

Father Vernon's *Happiness*.

J. B. HALDANE, *Chaplain*.

A. G. HARRIS, *Acting Chaplain*.

Change of Address.

Dr. D'Albon, 1, St. Stephen's Crescent, W.2. 'Phone: Park 4462.

W. C. Hancock (Doc.), "Fairlight," Alexandra Road, Bemerton, Salisbury, Wilts.

Leslie Lyne, Green Meadows, Ascot. 'Phone: Winkfield 111.

F. J. Nicholls, "Fairmead," 46, The Goffs, Eastbourne. 'Phone: 799.

A. G. Taylor, "Northend," Warley Road, Brentwood, Essex.

Births.

DOUTHWAITE.—On February 27th, at "Carlingford," Worthing, Sussex, to Gladys, wife of Dr. A. H. Douthwaite, a daughter.

HOUSDEN.—On February 27th, 1927, at "Caldecotts" Church Square, Basingstoke, to Dr. and Mrs. Leslie Housden (née Boyt)—a daughter.

RYLE.—On March 2nd, 1927, at 13, Wimpole Street, W.1., to John and Miriam Ryle, a son.

Marriage.

MOYKOPF — STORY. — On February 4th, 1927, quietly, at St. James's Spanish Place, Charles, Moykopf, son of the late F. W. L. Moykopf and Mrs. Moykopf, to Josephine, daughter of Admiral and Mrs. W. O. Story, of Guelph, Ontario, Canada.

Deaths.

BEVEN.—On February 18th, 1927, at High Road, Lee, S.E., Octavius Beven, M.D., B.S., D.P.H., aged 57.

COOK.—On February 20th, 1927, at Poole Hill, Bournemouth, Isaac Reginald Cook, M.B.B.S. (Lond.)

LONG.—On February 23rd, 1927, at The Close, Norwich, Frederick Long, M.R.C.S., L.R.C.P., in his 87th year.

SMITH.—On February 5th, 1927, at Redcroft, Port Talbot, D. Lloyd Smith, M.B.(Lond.), of Llandrindod Wells, aged 55 years.

Guy's Hospital Gazette.

(ESTABLISHED 1872.)

A Journal of Hospital News, Medicine, Surgery, and Dentistry.

Published on alternate Saturdays. Price **9d.**

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including "Directory of Guy's Men (Medical and Dental)," **12s. 6d.** post free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone, Hop 1086.

EDS. { P.F.S. C. / G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *March 26th, 1927.* *Number 1009*

PASSIM

On Wednesday, March 16th, we travelled down to Richmond and saw the Rugger XV bring home the Cup for the twenty-second time. The game was preceded, as usual, by the attempts of some hundred odd students, dressed in every variety of so-called "fancy costumes"—for the most part very unoriginal and in most cases not at all becoming to those wearers—to persuade King's to attack our milk churn. After about twenty minutes the rag absolutely failed as such, and we wonder whether this is premonitory of the time when Guy's men will go down to the Cup Final as their normal selves rather than as ill-dressed hooligans. We feel that the matter of dress needs more stringent supervision by those who control the men on these occasions. While rather deploring the exhibition of the "raggers" on the field at Richmond—we would draw their attention to a letter published in this number—we must congratulate them on establishing a record collection for the Hospital in Town before they went down to Richmond. The almost incredible amount of £609 12s. 3d. was obtained in the space of three hours, which speaks well for the pertinacity of those collecting who could obtain so many "thick 'uns" from the unsuspecting and unprepared public.

The match is described elsewhere, but we should like to take this opportunity of congratulating Mr. Gordon Cameron and his team on maintaining Guy's Rugger at such a high standard during the past season and on bringing the Cup back once more to its homely abode in the "Spit."

▭

The 6th Annual Dinner of the Thirty Club will be held at the Royal Adelaide Gallery Restaurant, King William Street, Strand, on Friday, May 20th, at 7.30 for 8 p.m. Mr. A. H. Harkness will be in the Chair. Notices will be sent to all members. In the event of change of address members are requested to notify one of the Honorary Secretaries :—

J. J. Conybeare, The Warden's House, Guy's Hospital.

V. E. Lloyd, 28, Devonshire Place, W.1.

▭

On another page will be found an advertisement relating to the terms of Motor Car Insurance provided by the Medical General Insurance Association, Ltd., of Rectory House, 67, Queen Street, E.C.4. We are satisfied that the claims of the Association to offer benefits—which are, in fact, special to the medical profession—are well founded, both in respect of the unusually wide comprehensive cover of the policies and the low rates of premiums charged.

▭

The photos of the Rugby Football Final have been reproduced in this number by the kind permission of the Central News Agency.

▭

The Institution and Induction of the Rev. A. G. Harris, M.A., who was for many years Assistant Chaplain at this Hospital, is to take place on Wednesday, March 30th, at 8 p.m., at the Church of St. Nicholas, Plumstead. A train leaves London Bridge for Plumstead at 7.19 p.m.

▭

We note with regret the passing of two old Guy's men. Dr. Clowes was contemporary with such men as Bright, Addison and Hilton, and was thought to be the oldest but one of living Guy's men, his senior being Dr. Dixon of Bermondsey. Dr. Muspratt was, during his student days, a brilliant athlete, captaining in turn both of the football teams. He also held many House Appointments while at the Hospital.

"When we were very young," as Mr. A. A. Milne would remark, there were chiefly four types of persons who inspired a great measure of awe, and these were barbers, doctors, hospital nurses and dentists, for not only was it into their hands that we delivered our bodies from time to time, but there was about them—and peculiar to each—a mysterious atmosphere, literally and metaphorically.

It is difficult to recover from the impression made by a huge white-coated man manifestly skilful with a sharp edged tool, though in those days the tortures of shaving were unknown, who combed painfully from the hair of a juvenile head wax of the previous night's candle, burnt while reading some adventure book, and the recollection of his remark about "rat's nests" still causes a faint feeling of shame, which subsequent realisation of the general garrulous fatuity of barbers fails entirely to suppress.

The doctor of those earlier days was a mysterious and obviously omniscient man, having the powers of life and death in a leather bag. A magician, with the privilege of telling the most gross of untruths, in which he was aided and abetted by otherwise honourable parents. His worst lies were told before his nauseating activities with the wrong end of a teaspoon, after which his whole manner would imply a knowledge of all things. With the doctor we have learned to sympathise, and therefore our awe has gone, for now we know that the air of omniscience is a necessary cloak to hide the feverish attempt to sort the tangle of probabilities that is always in his mind.

To be subjected to feminine authority at the stage when trousers are a recent promotion must necessarily provoke a rebellion, sternly suppressed by a female with a face resembling something half way between that of a golden eagle and a turkey cock—a female imported to minister to an influenza-racked aunt. The awe occasioned by the suppression of this childish rebellion persisted for many years, till we recognised that this disciple of Florence Nightingale probably was not as aseptic in her methods as she might have been. For the recollection remained of her taking temperatures all round without intermediate sterilisation of the thermometer. And, later on, coming unexpectedly on a senior nurse weeping silently after attempting to sterilise *thoroughly* gum elastic catheters by boiling them for an hour, our last shreds of awe gave way to a sympathy equal to that which we feel for fellow practitioners.

Lastly, there remains the dentist, in whose hands we are all still as wax. For having fixed us in a contrivance, devised by the best mechanical brains, we are gagged as we were when seven years old and subjected to the same indignities. Who does not feel insignificant with a large quantity of scaffolding in the mouth and a machine such as is used for digging up the streets shattering the teeth. Nor is there the relief even of expressing feeling except by feeble gurgles and grunts. With relentless efficiency and genial small talk he quarries in our heads till, reduced to the state of a semi-comatose earthworm, we render silent homage.

That they can, however, be exceedingly kindly and ordinary folk was proved to us on March 12th, when the Guy's Hospital Dental Society held their twenty-eighth Annual Dinner under the Presidency of Mr. H. C. Malleson.

This Dinner is, very unfortunately, the last which Mr. Montagu Hopson will attend as Senior Dental Surgeon on the active Staff, and was therefore no ordinary occasion, for Mr. Hopson is almost the *fons et origo* of our Dental School, started by him with one Dental student 38 years ago, where as it appears to-day, as Mr. Eason remarked in his speech proposing the toast of Guy's Hospital, that Guy's was in a fair way to becoming a mighty Dental School with a small Hospital attached.

Elsewhere we publish a full account of the Dinner, with Mr. Hopson's speech, which was characteristically witty and genial. Particularly interesting were his remarks about the early days of the Students Clubs' Union, when it was housed in a disused ward, and it was possible to eat as much as the gastric cavity was capable of containing, and subsequently declaring the amount to the cashier, which was apparently a very satisfactory and cheap method.

On looking through the Annual Dispensary Report, a striking feature is the large amount of money spent on liquid paraffin, namely, £782 10*s*. for 2,679 gallons. This must surely gladden the hearts of those who regard the colon as the source of all evil. Quite recently a lady living in the Borough visited the Hospital, and it was found necessary to send her to three different Departments, from each of which she collected an order for medicine and carried away, in accordance with the three orders, three large bottles of paraffinum liquidum. It has been suggested as a labour-saving device that a pump, such as is to be seen in front of most petrol depots, should be erected outside the dispensary for the purpose of distributing more easily the 2½ thousand odd gallons of paraffin per year.

Mr. W. R. Spurrell, M.S., F.R.C.S., has been appointed Surgical Registrar to Mr. Fagge on Mr. B. L. Laver's retirement.

Control of Capillary Circulation.

By P. Maxwell Bishop.

MR. CHAIRMAN AND GENTLEMEN,—I intend to treat my subject—the Control of the Capillary Vessels—from an entirely physiological point of view, and I want to emphasise especially two facts which have come into prominence only during the last few years, as the result of the more modern work. The first is that the capillaries are, for the most part, quite distinct in the regulation of their distension and collapse from the arterioles and venules. This is a fact which the reader of many physiology books is quite likely not to grasp. The second is that there is a definite nervous control of the capillaries, and also a chemical control, the two being quite distinct.

From a physiological point of view the capillaries are probably the most important part of the Vascular System, for it is from them that diffusion of oxygen and nutritive substances into the tissues takes place, and it is to them that the tissues give up their carbon dioxide and waste products. Thus it is not surprising to find that the blood supply to a tissue varies according to its functional activity. In the brain and diaphragm, both of which are constantly active, the capillaries appear to be always open, and the average diameter of the open capillaries is greater in a contracting muscle than when it is in a condition of rest.

With this function of the capillaries in mind, it is obvious that it would be of advantage if the control of the contraction and expansion of these vessels were independent of the arterioles, for in this way the mechanism of varying the blood supply to a tissue according to whether it is active or in a state of rest would become extremely delicate and efficient. That this is what actually happens may readily be demonstrated by drawing the nail lightly along the back of the hand. A white mark persists for a few seconds along the path of the nail, and is strictly localised to this area, showing that whereas the capillaries of this area have contracted, their immediate neighbours are unaffected. Moreover, an observation made in 1879 by Roy and Graham Brown[1] provides further proof of the independent contractility of the capillary vessels. After applying pressure to a particular area of a frog's web, they examined the field under a microscope and noted the capillaries which had been obliterated. Further, on reducing the internal pressure to 0, by occluding the arterioles, they observed no appreciable contraction of the capillaries.

The question which now arises is—what element in the capillary is responsible for its contractility? We all know that arteries and arterioles contain in their walls involuntary muscle fibres which by contraction and relaxation alter the diameter of these vessels. The walls of the capillaries, however, consist simply of a single layer of endothelial cells, and possess no muscular coat. In 1873, Rouget[2] observed on the outside of the endothelial tubes certain oblong nuclei, arranged in the direction of the tube and surrounded by a zone of protoplasm with ramified elongations embracing the capillary in a number of places like so many hoops. He claimed to have seen these cells in a state of contraction in the living newt larva. His work attracted little attention at the time, and it was not until 1922 that it was brought into prominence by Vimtrup,[3] who was investigating the subject of capillary tone with Professor Krogh in Holland. Vimtrup christened these cells after their original discoverer, and believes them to be similar in character to the ordinary spindle cells found in the muscular coats of arteries. He described the changes which occur when these cells contract, and asserted that spontaneous contraction and dilatation of single capillaries is of frequent occurrence, and that contraction always begins just where the nucleus of a Rouget cell is located. So universally was Vimtrup's work accepted that Krogh[4] published a book entitled *The Anatomy and Physiology of the Capillaries*, in which he bases his conception of the tone of these vessels entirely on his belief in the presence of these Rouget cells, and in which he makes the following statement :—

"Rouget cells have been observed on so many different capillaries in amphibia that they can safely be said to exist in almost all tissues."

This statement, however, did not pass without provoking adverse comment. Oinuma,[5] for instance, said that he had observed, in all his experience, only two capillaries which had definitely contracted independently. In all other cases the variation in capillary diameter always corresponded to a variation in arteriole diameter. He supports his views by two experiments, one in which he compressed the femoral artery and found that the capillary diameter decreased, the capillaries returning to their original state when the compression was taken off. In the other experiment he compressed the middle of the thigh, closing the vein but not the artery. In this case the calibre of the arteries and capillaries increased. He,

therefore, concluded that the diameter of the capillaries varies with the blood pressure. Langley[6] pointed out that if the Rouget cells were arranged round the capillaries in the way that Rouget and Vimtrup describe, then when they contracted the endothelial wall would bulge between their ramifying processes, a condition for which there is no microscopical evidence. Finally, Florey and Carleton[7] published a paper last June in which they deny the presence of Rouget cells in the mesenteric capillaries of the cat and the dog, although they give evidence of the ability of these capillaries to contract and expand independently of the arterioles. They, therefore, ascribe the motor activity of the capillaries to the endothelial cells themselves—in mammals at any rate. The balance of evidence is, I think, in favour of their conception.

That the capillaries are supplied by sympathetic nerve fibres has been shown by many observers and it will be necessary to mention only one experiment in order to make this clear. This is an observation of Leriche and Policard.[8] As a result of mechanical stimulation of the sympathetic fibres of the humeral artery in man they obtained contraction of the capillaries at the base of the nail. Moreover, it has been shown that the tone of the capillary vessels is normally maintained by impulses constantly passing down the sympathetic fibres to the walls of the vessels, for on cutting these fibres passive relaxation occurs in the vessels which they supply. There are three main systems which when stimulated will cause capillary dilatation. One of them is the inhibition of sympathetic tone just mentioned, causing passive dilatation. This system I will speak of as the "spinal reflex system," and in connection with it two phenomena must be mentioned. One is the so-called Loven Reflex. Loven[9] found that on stimulating the central end of a sensory nerve he produced reflex relaxation of the sympathetic tone and, consequently, vaso-dilatation. The other phenomenon is known as Reflex Erythema. You have all noticed the region of inflammation which develops around a tender or painful spot. This inflammation is due to reflex dilatation of the capillaries of the painful zone. It has been shown to be strictly associated with the pain, for if the skin is rendered insensitive by cocainisation the hyperæmia does not develop. The capillary dilatation is also absent if the spinal cord is destroyed at the level of entrance of the pain fibres, or if the sympathetic fibres to the vessels are cut. It is evidently, then, a protective spinal reflex, whose path is from the pain receptors of the skin, through the posterior root fibres to the spinal cord and thence by the sympathetic fibres to the walls of the capillary vessels. The second system may be described as the "antidromic vaso-dilator system." Antidromic vaso-dilatation was originally described by Bayliss,[10] and constitutes one of the exceptions to Bell and Magendie's *Law of the Spinal Roots*,[11] which states that afferent impulses only are evoked by stimulation of any nerve fibre which enters the spinal cord by the posterior root. Mechanical stimulation of the lingual nerve of a frog results in dilatation of the capillaries of the tongue. In this case the hyperæmic reaction is unaffected by section of the nerves and is only abolished when the nerve fibres are given time to degenerate. This shows that the impulse never reaches the spinal cord, but it is supposed that the sensory nerve fibre which is distributed to the skin gives off a branch locally to the vessels supplying the skin in that area, so that a sensation of pain is transmitted to the spinal cord and higher centres, while at the same time an impulse passes down the collateral branch to the walls of the vessels and causes protective vaso-dilatation. The proof that the capillaries as well as the arterioles are supplied with antidromic fibres is due to Doi.[12] Finally, there is the system of direct mechanical stimulation, in which the contractile elements of the underlying capillaries are directly stimulated by pressure on the skin. This will be more fully described when we come to discuss Lewis's work in connection with skin reactions.

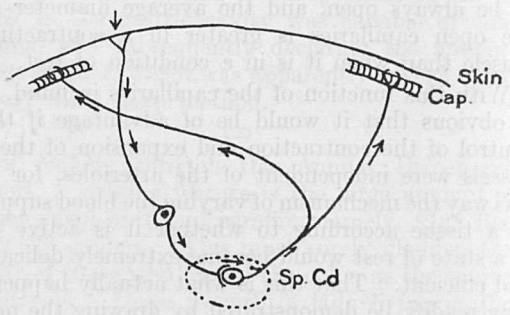


Fig 1. The "Spinal Reflex" Mechanism.

The extent of the hyperæmic zone depends on the particular system stimulated. In the case o direct mechanical stimulation the zone is strictly localised. In the case of antidromic dilatation, the area of hyperæmia is slightly more dispersed, whereas if the spinal reflex mechanism is involved the region of skin inflamed is considerably greater. One must always bear in mind, in considering the evidence of active control of the capillaries, that they are not uninfluenced as well, in a purely passive manner, by blood pressure relations and the state of contraction of the arterioles. This is emphasised by Langley,[13] whose observation of

the capillary changes in the pads of the cat led him to describe a "Capillary System" consisting of (i) the capillaries of the skin, (ii) the dermal venous network, and (iii) the capillaries of the subcutaneous tissue. He believes that this capillary system may be practically emptied of blood and so made to collapse by a decrease of the blood pressure in the neighbouring arterioles. The degree to which this effect is produced by a given lowering of the blood supply depends on the tone of the capillary system at any particular moment. If the tone has already been decreased by previous antidromic impulses, a considerable decrease of local blood pressure causes only a

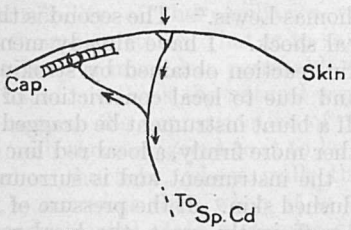


Fig 2. The "Anti-dromic Vaso-Dilator" Mechanism

Fig 3 Direct Mechanical Stimulation.

slight change in the capillary system. He cannot decide whether the antidromic vaso-dilatation is produced by the afferent fibres ending in the capillaries, or by the afferent fibres setting free metabolites when stimulated. On the latter theory, the varying tone of the capillaries might be regarded as being produced by physical changes occurring in the epithelioid wall and leading to a change in diameter and in extensibility.

The diameter of the capillaries is affected by the action of certain drugs and in many cases this action is entirely independent of the nervous regulation, which we have just discussed. You know that most of the tissues of the body are believed to be influenced by chemical substances conveyed to them in the blood. Most of these activating principles are derived from the endocrine organs, whose internal secretions are poured directly into the blood. Rehberg,[14] another of Krogh's collaborators, was struck by an observation of Pohle[15] on the development of œdema after operative removal of the pituitary gland, and determined to investigate the possibility of connection between the active principle of this gland and the chemical regulation of capillary tone. Krogh,[16] as the result of certain observations, had come to the conclusion that there is something in the blood which maintains the tone of the Rouget cells and that, as soon as the supply of this substance is stopped, the Rouget cells relax and the capillaries dilate to allow more blood to enter. The blood on entering brings with it the required supply of this substance and the capillary tone is reinstated. This substance he christened "Hormone X." Rehberg succeeded in fractionating Hormone X to a considerable degree of concentration and found that, besides possessing many physical properties in common with pituitrin, this hormone exerted an exactly similar control over the melanophores or pigment cells, by contraction or expansion of which the frog is enabled to adapt the colour of its skin to its surroundings. He further found that removal of the pituitary gland from the frog resulted in loss of capillary tone. On this evidence Krogh put forward the suggestion that the maintenance of capillary tone is controlled by pituitrin. Dale,[17] however, is inclined to disagree with this assertion and calls attention to the part played by adrenalin in causing the capillaries to contract. He believes that the variation in capillary diameter is controlled by the adrenalin-histamine balance of the blood passing through these vessels. It has been shown that whereas histamine, in certain doses, causes the capillaries to dilate, adrenalin frequently constricts these vessels. The administration of histamine causes a relaxation of the endothelial cells, whose permeability is consequently increased. On account of this increased permeability, plasma escapes from the vessels into the surrounding tissues and the blood within the capillaries becomes concentrated, resulting in the condition of œdema. If, however, adrenalin is administered with the histamine, the onset of œdema is held in abeyance. Removal of the suprarenal glands, which on Dale's theory would give the histamine free play, results, according to expectation, in loss of capillary tone and œdema. The adrenalin constrictor effect, however, cannot always be produced and this naturally creates doubt as to the unassailability of Dale's theory. The sympathico-mimetic action of adrenalin is well known to you all and the possibility of the action of this substance by stimulation of the sympathetic nerve endings should, I think, claim our consideration, though it is hotly denied by Dale and Richards.[18] I am inclined to believe, with regard to the chemical control of capillary constriction, that pituitrin exerts a direct chemical effect on the contractile elements, that adrenalin acts through the sympathetic nerve endings, and I am open to conviction that there may be some other chemical factor or factors as yet undiscovered.

With regard to the chemical control of capillary dilatation, one must look to those substances which are labelled capillary poisons. Under this heading the following are the main agents to claim our attention :—

1. Gold salts ;
2. Acetyl choline ;
3. Certain anæsthetics, such as urethane and choloroform ;
4. Insulin ; and
5. Histamine.

Gold salts are obviously not present in the organism and may therefore be ruled out of consideration, though they cause extreme capillary dilatation and their application is very quickly fatal. As Heubner[19] expresses it : " The animal bleeds to death into its own capillaries."

Acetyl choline has been shown to affect the capillaries only indirectly through the arterioles.

The action of urethane is, at any rate partially, dependent upon nervous integrity, for its effect is considerably decreased both in rate and degree by cocainisation.

Chloroform interests us only because, owing to its capillary dilator effect, it increases the tendency of the patient to suffer from post-operative or surgical shock, a condition which is very pertinent to the subject under discussion and one which I propose to speak of almost immediately. The only anæsthetic which does not increase the risk of surgical shock is nitrous oxide.

With regard to insulin, I thought it worth while to bring to your notice a paper by Redisch,[20] written in 1924, in which the author points out that intravenous injection of this agent causes capillary dilatation and a fall in blood pressure. He believes that insulin antagonises the capillary reaction caused by adrenalin. Unfortunately, as far as I know, this work has not been confirmed and, until this occurs, I do not think we are justified in allowing the observation to influence us to a great extent.

We are therefore bound to consider in some detail the effects of histamine on capillary dilatation and to decide whether we shall consent to the view that it is one of the direct factors concerned in the control of capillary tone. In the first place Dale and Richards[21] bring forward good evidence that histamine causes general dilatation of the capillaries, whereas in small doses it constricts the arterioles. If given in large doses it brings about a lasting fall of blood pressure owing to its dilator effect upon the arterioles as well as on the capillaries. These workers have further shown that the action of histamine is entirely independent of nervous control. They believe that the degree of capillary dilatation caused by histamine is influenced by three factors :—

1. The condition of the blood vessels at the time of injection, for the action of histamine is favoured by the presence of tone in the capillaries.
2. The type of animal. This factor has been the cause of a good deal of the scepticism of some investigators, for it is impossible to obtain satisfactory results with some animals.
3. Different organs. The capillaries of some organs of the body seem to show the effect better than those of other organs.

There are two pieces of evidence which greatly favour the theory that histamine exerts a direct dilator effect on the capillaries. The first is the phenomenon of the red skin tache, as investigated by Sir Thomas Lewis.[22] The second is the question of surgical shock. I have already mentioned the white skin reaction obtained by stroking the skin lightly and due to local constriction of the capillaries. If a blunt instrument be dragged across the skin, rather more firmly, a local red line marks the track of the instrument and is surrounded by an area of flushed skin. If the pressure of the instrument be sufficiently great, the local red line will later become œdematous. Lewis has pointed out that the local red line is due to the liberation of some chemical agent by actual traumatic injury to the tissues, caused by the mechanical pressure applied. This he showed by the device of occluding the vessels after making the tache. He found in this case that the tache persisted until the compression was released, showing that as long as the chemical agent was prevented from escaping the dilatation continued. The surrounding flush, however, is due to reflex arterial dilatation, for if the circulation was stopped by occlusion before the tache was made no surrounding flush occurred. When œdema occurs it is due to the increased permeability of the capillaries, caused by the liberation and action of this same chemical agent. Lewis imitated these phenomena very closely by the local injection of histamine, and is convinced that they are due to the liberation of some histamine-like substance from the tissues.

This explanation fits in very well with the phenomena of surgical shock or traumatic toxæmia. As the result of an operation or of a wound which has caused considerable laceration of the tissues, the blood pressure is liable to fall and the patient to suffer from an apparent loss of blood volume quite out of proportion to the amount of blood actually lost during the operation or as a result of the injury. It is supposed that what actually happens is that histamine or a histamine-like substance is liberated from the tissues by the laceration and causes a general dilatation of the capillaries, so that the blood virtually stagnates in the dilated capillaries and the circulating volume is decreased. Here, then, is a protective

mechanism originally intended to increase the circulation to a locally injured spot which may, if carried too far, be of actual danger to the organism. You will realise now how an anæsthetic, being a capillary poison and therefore itself a capillary dilator, aggravates the condition of surgical shock. With this evidence in mind we should, I think, look favourably on the suggestion that histamine exerts a direct influence on capillary tone quite independent of any nervous stimulation.

Before I stop I should just like to draw your attention to three further aspects of this subject: Capillary Permeability, the Reactions of Capillaries to Light and to Temperature.

The permeability of the capillaries varies inversely to their diameter. That is to say, a contracted capillary is much less permeable than one which is dilated. I think the natural way to look at it is to imagine the approximation of one endothelial cell with those adjacent to it to be far more intimate when the tube, whose walls these cells constitute, is narrower than when it is wider, so that, in the contracted state, molecules of a comparatively large size such as proteins cannot get through between the chinks. Thus, in the extreme condition of Histamine Shock or Wound Shock, where the capillaries are widely dilated, the serum and even the proteins escape, leaving the corpuscles "high and dry." Such a condition leads to the production of œdema, the surrounding tissues being flooded with the fluid exuded from the vessels, while the blood within the capillaries is in a semi-solid condition of stasis. The mechanism is, of course, protective, for if it is not overdone the tissue receives the materials, which it requires during its increased activity, by the local dilatation and consequent increased permeability of its capillaries. Underhill and Epstein[23] have shown that changes in the permeability of the capillaries may be caused by any of the following conditions—anæsthesia, hæmorrhage, war gas shock, peptone shock, water deprivation, saline purgation, influenza or nephritis. This leads, of course, to a change in the blood volume which may be calculated by estimating the concentration of hæmoglobin by means of a colorimeter. After normal saline injection, slight anæsthesia, or alcohol narcosis—that is, alcohol introduced into the stomach—increased permeability occurs, but the blood recovers its normal concentration in 35 minutes. Peptone severely damages the capillaries and, if injected when alcohol narcosis has been induced, greatly increases the permeability, resulting in a low blood pressure and a high blood concentration.

The capillaries are sensitive to ultra-violet rays, and this, of course, is the explanation of sun-burn. Jansen[24] described the action of the sun's rays on the capillaries of the skin as a sharply localised dilatation with prolonged after-action. If the sympathetic fibres supplying the area of skin exposed are cut, the reaction begins and ends earlier and one must remember that a great deal of the dilatation, in this case, is due to the cutting off of the sympathetic tonic impulses. The action of light is therefore obviously not on the sympathetic nerves, but is due to the direct action of the chemical actinic light rays. The power of resistance to the internal pressure of the blood becomes gradually lowered by some unknown process, which is induced by the light, but which is able to go on afterwards without further stimulus. Niels Finsen[25] confirmed Jansen's views by the following experiment. He kept the skin of his forearm constantly covered for a considerable time until it was completely unpigmented. He then fastened white and coloured glass and a small plate of rock crystal on to the arm and also painted his initials on it in India ink. He then exposed the arm to an arc lamp for one hour. On removing the glass, crystal, and India ink he found an erythema to have developed throughout, except for the parts covered by the glass and the India ink. This was followed in ten days by acute light dermatitis and desquamation. The rock crystal area was as inflamed as the other parts, so that the inflammation had been produced by rays which can pass through the crystal, but not through the glass or India ink—that is, by ultra-violet rays. The desquamation was followed by pigmentation. He further concluded that the "sun-burn" was not due to the heat rays, but solely to the actinic rays. This is confirmed by the observation that climbers on glaciers suffer from "sun-burn" only on the lower part of the face—that is, the part which has been exposed to the light reflected from the ice and snow.

Broadly speaking, cold causes the capilla ies to contract and the heat causes them to dilate. With temperatures above 37° and below 45° the vessels tend to dilate. From 45° to 60° contraction predominates, owing to stimulation of the sympathetic. Above 56° the vessels contract and then gradually relax, the endothelial wall being now definitely injured by the heat. Local exposure of the human skin to cold causes local blanching. If the exposure be prolonged, the skin becomes cyanosed. Sometimes relaxation of the capillaries and venules occurs after a time and is probably due to partial paralysis of the contractile cells. The initial contraction is partly reflex and partly mechanical. Wernöe[26] noticed the reflex part by

exposing the abdomen of a patient suffering from some intestinal disease to the cold air. The hyperæsthetic area corresponding with the seat of the disease blanched before the rest. Breslauer[27] drew attention to the mechanical part by producing, in an animal, local paleness in completely anæsthetised areas, in which the spinal nerve supply had degenerated.

To sum up :—

1. The capillaries are controlled independently of the arterioles ;

2. The elements responsible for the motor activity of the capillaries are the endothelial cells themselves.

3. The regulation of capillary tone is partly nervous and partly chemical.

4. With regard to the nervous regulation, the sympathetic system causes constriction, whereas dilatation may be due to a spinal reflex mechanism and antidromic vaso-dilator mechanism, or direct mechanical stimulation.

5. The chemical regulators of constriction which were discussed were pituitrin and adrenalin. Capillary poisons were mentioned as causing dilatation and some of them were enumerated. Of these, evidence was given that histamine is the main chemical regulator of dilatation, this evidence including a short description of Lewis's work on Skin Reactions and of the phenomena of Surgical Shock.

6. The permeability of the capillary vessels varies under the influence of certain factors, some of which were mentioned.

7. The dilator reaction of the capillaries to light is due to the chemical activity of the ultra-violet rays.

8. The capillaries react by constriction to low temperatures and by relaxation to high temperatures. The reaction to cold is partly reflex and partly mechanical.

REFERENCES

1. Roy and Graham Brown, 1880, *Jl. Physiol.*, ii, 323–359.
2. Rouget, 1873, *C. R. Acad. Sc.*, lxxix, 559–562.
3. Vimtrup, 1922, *Zs. ges. Anat.*, lxv, 150–182.
4. Krogh, 1922, *The Anatomy and Physiology of the Capillaries.*
5. Oinuma, 1924, *Jl. Physiol.*, lviii, 318–327.
6. Langley, 1923, *Jl. Physiol.*, xlviii, 46-69.
7. Florey and Carleton, 1926, *Proc. R. S.*, 100 B.
8. Lericha and Policard, 1920, *C. R. Soc. Biol.*, xx.
9. Loven, 1866, *Ber. Sachs. Ges.* (*Leipzig*), xviii, 85–110.
10. Bayliss, 1901, *Jl. Physiol.*, xxvi, 173–209.
11. Bell and Magendie, See *Starling*, 323, or other Text Books.
12. Doi, 1920, *Jl. Physiol.*, liv, 227–238.
13. Langley, *loc. cit.*
14. Rehberg, see Krogh's book.
15. Pohle, see Krogh's book.
16. Krogh, *loc. cit.*
17. Dale (and Richards), 1918, *Jl. Physiol.*, lii, 110–165.
18. Dale and Richards, *loc. cit.*
19. Heubner, 1907, *Arch. f. exp. Path. u. Pharm.*, lvi, 370.
20. Redisch, 1924, *Klin. Woch.*, iii, 2235–2238.
21. Dale and Richards, *loc. cit.*
22. Lewis, 1924, *Heart*, xi, 49–135.
23. Underhill and Epstein, *Jl. Pharm. and exp. Ther.*, xxii, 195.
24. Jansen, 1904, see Krogh's book.
25. Finsen, 1900, see Krogh's book.
26. Wernöe, 1920, see Krogh's book.
27. Breslauer, see Krogh's book.

Correspondence.

Guy's Spectators.

DEAR SIR,—I have received the enclosed letter from the Secretary of the United Hospitals' Rugby Club, and I would be much obliged if you would publish it.

The letter explains itself, and perhaps in the near future a way out of the difficulty would be for the "Rag" Committee to supply a ticket, including admission to the ground.

I should like to suggest that in future the idea of a theatre in the evening be abandoned, as very few desire it—and the theatres do not want us either.

Yours truly,

W. D. G. JONES,

Hon. Sec., Guy's R.F.C.

DEAR JONES,—I am afraid that I must protest about the conduct of some of the Guy's spectators yesterday.

About 60 to 80 of them climbed over the wall and refused to pay ; also some were extremely rude to Mr. Rockett, Secretary of the Athletic Association.

This is not fair to any of us.

Over the payment question, you might point out that it hurts Guy's as well as others, because it lessens the amount available for distribution by the United Hospitals' R.F.C. to the competing Hospitals.

Yours truly,

H. MILLETT, *Hon Sec.*

3, Portland Place, W.1
17th March, 1927.

Guy's Hospital Dental Society.

ANNUAL DINNER.

THE acceptance of the office of Honorary Secretary of a club usually entails much hard work—for which the thanks are few and the grumbles are many. However, the Honorary Secretary of the Dental Society has proved that such a fate is by no means the rule, for Mr. R. F. Prichard, while having more than enough work to do in connection with the dinner, earned the thanks of all who were present at this function and was not the recipient of any serious complaints.

An innovation was introduced this year in that the efforts of an entertainer were not included in the programme, while the speeches and toasts were made as short as possible. In consequence, past members of the Society were able to break up into small groups and enjoy the opportunity of a chat with friends who meet far too seldom.

Two hundred and ninety-nine were present at the Dinner, which was held at the Trocadero Restaurant on March 12th. This number, while not in itself a record, was well up to the standard of past years.

Mr. H. C. Malleson, the President of the Society, was in the Chair, and proposed the toast of His Majesty the King, which was followed by that of H.R.H. the Prince of Wales and the Royal Family.

Mr. H. L. Eason, in proposing the toast of Guy's Hospital, laid stress on the manner in which the Dental Department had grown in the last 36 years, and at the same time pointed out that these expansions had unfortunately resulted in a heavy deficit on the last year's working; one misfortune, to which was added another—the retirement of Mr. Montagu Hopson from the active list of the Hospital.

Mr. M. F. Hopson replied to the toast of Guy's Hospital and commented on the way in which residence in the Borough inculcated the ability to say much in a few words. He compared the present buildings of Guy's with those that were standing when he first joined the Hospital as a student, and went on to describe the catering arrangements of those days, when one helped oneself and paid the manager at the end of the meal.

In conclusion, Mr. Hopson described the living spirit of Guy's, which once having seized a man never left him, but rather increased in force and formed a bond of union between the 3,200 past students from all quarters of the Empire. He himself had last Christmas received so many letters from all parts of the world that he had not been able to answer them all.

To Mr. E. B. Dowsett fell the task of proposing the health of the visitors, coupled with the name of Mr. A. T. Pitts. He said that he found it difficult to decide who were visitors and who were not, as there were many Guy's men present not members of the Dental Society. He also referred to the new Catering Company, who had entertained him to a most delicious repast on the occasion of the last Final examinations in Dental Surgery. Although a member of Guy's he was a guest, and deeply regretted the fact that the candidates examined during the afternoon following were from another Hospital.

Mr. A. T. Pitts replied to the toast of the Visitors and compared the growth of the Dental School and buildings to the evolution of a butterfly from its chrysalis stage to its final perfection.

Mr. A. Bulleid gave the toast of the President, which was received with loud acclamation. He was only too glad that this year our President had managed to escape the machinations of some wily micro-organism. He went on to say how delightful it was to work with Mr. Malleson—a fact to which many present were able to testify—and how on divers occasions his ready wit had provided an appropriate remark to an awkward moment; how his tact helped men to feel that they were doing better than they really were, and so eventually did manage to do better.

Mr. R. Malleson replied to the toast of his health by denying the possession of eloquence and tact, which he immediately proceeded to disprove. He referred to the excellent attendances at the monthly meetings of the Society, and stated that the real reason for these was the hard work that had been so efficiently carried out by the Honorary Secretary, Mr. Prichard, and his Committee. Mr. Prichard had excelled himself in his arrangements for the dinner, the credit for which should be given to him.

Mr. R. F. Prichard, who was the last speaker for the evening, thanked Mr. Malleson for his kind remarks, and further stated his obligation to last year's Honorary Secretary, Mr. J. White, and to the Honorary Treasurer and the Committee, who had backed him up so well throughout the past session, while the thanks of all were due to Mr. F. C. Tomlyn for his excellent posters and to Mr. E. N. Stevens, who ably performed on the piano for several of the toasts.

Sport.

Rugby.

Inter-Hospital Cup.

Final.

Guy's v. King's.

ON Wednesday, March 16th, Guy's won the Cup for the twenty-second time by beating King's by 2 goals to 0 (10 points to 0).

At once we will say how much we deplored the absence of the two King's Internationals, D. J. MacMyn and R. Cove-Smith, who were resting in view of the Calcutta Cup match on the following Saturday, but those King's men who made up the XV played like Internationals, and evidently the absence of the more noted of their players spurred the remaining side to tremendous effort. Surely Collis, King's Irish International, has never played better and G. F. Taylor, Salkinder and Knox put in a rare afternoon.

The game had been in progress but a short time when A. L. Wade made a dash for the corner; F. H. B. Spence just reached him in the nick of time and both crashed to touch. Wade had his head badly cut and was plastered up. Spence had sustained torn ligaments of the knee, and was thereafter useless and henceforth played on the wing. Wade also pluckily resumed and, though his head must have pained him, he did not let his play suffer. Our forwards were terribly slow, their breaking up funereal, and King's snapped up the ball and passed safely. Boyle was tested and found as safe as ever. But it took us twenty minutes to get a footing for attack. The ball came to Preen, who made a determined effort, eventually handing to Garland, who plunged over, hitting the goal post heavily on the way. Durr converted. Knox headed a rush to our end and we touched down. At the other end a penalty awarded us was taken by Durr, but, though near, the kick was not successful. Getting the ball from the scrums and passing freely King's made headway. They were constantly opening up play. Yet half time arrived with nothing more scored, though Wade had had another sprint for the corner flag.

Spence's injury and displacement made attack on the left wing impossible. Lewis, playing inside

By the courtesy of Central News Agency.

Boyle relieves pressure with a good kick.

By the courtesy of Central News Agency

Myburgh in possession.

him, could always run away and find himself unsupported outside. One good piece of play between Preen, Lewis, and Preen again looked hopeful, and it led to J. Durr getting to a foot from the line, but he was then held up. Play settled in midfield. Preen was not so safe with his hands, but his kicking was splendid. A lofty kick of his was very badly followed up, our forwards with one or two exceptions being lifeless. King's marked —not a difficult kick—but no goal resulted. Then we found ourselves with our backs to the wall till Cameron led a rush to safety. Repeatedly Farr of King's punted high and followed up, but Boyle never made a mistake, and this form of aggression seemed scarcely a paying proposition. We were rather grateful, and so was Spence himself, that they did not play on to his wing with Wade opposed to him—because Wade in full sail wants holding. However, it is one thing to suggest a plan of campaign and another to carry it out. The ball certainly came our way more this latter half, though Garland was much hampered by Marshall at scrum half. One thinks that even Marshall must have thought the referee was very lenient with him. Now came the thrill of the match. In midfield Preen deceived the opposition for the first—and last—time by cutting through. After a neat dummy on the halfway line he romped away, passed to Wilkinson, and the latter to Lewis for a really good try, which Durr converted. Just after, one almost imagines we could have scored again, but a short punt was tried, and its object failed. The match ended with Guy's victors after a very hard battle.

Guy's Team—V. G. Boyle; G. J. Clarke, F. J. Wilkinson, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, V. R. Preen; G. C. Cameron, W. H. Myburgh, J. Durr, J. R. F. Popplewell, J. W. Schabort, J. H. Cullinan, A. Simpson-Smith, C. D. Malone.

The team are to be congratulated on bringing the Cup back to us. Although many first rate players left us last season Cameron and his officers have done great work in building up a thoroughly good side, though they may not have shown quite the form expected perhaps in this encounter. Those who knew realised that King's were a good side, and they proved themselves a very tough proposition.

A. J. D. Lewis played his best game for us, and Boyle was a very reliable full back. The forwards who did particularly well were J. R. F. Popplewell and C. D. Malone.

By the courtesy of Central News Agency.

King's obtain the ball from a line-out.

Guy's v. Rosslyn Park.

THE Old Deer Park, Richmond, is famous for its splendid firm turf. On this perfect ground this match was played on March 5th in comparative fine but threatening weather. Our side was not representative, Cameron, Durr, Schabort, Simpson-Smith and Morgan away from the forwards and Garland away from the backs. The Rosslyn Park team were minus the services of Fulljames, the English Trial threequarter. Almost in the first few minutes of the game our backs put in their only decent bout of passing, but Preen hung on much too long, and the opportunity was wasted. The wind was strong in our faces and Chantrill, the old English and Bristol full back, who now plays for the Park, drove us back repeatedly with long kicks. This took a lot out of the forwards, yet making every allowance, they played very sluggishly, the only ones to show some spirit being Brown and Malone. Popplewell put in a dribble or two, and Cullinan one noticed occasionally. The first mark on the score sheet came from a penalty kick against us and taken from midfield, Moore landing a good goal. Next, the same player, who is a strong and powerful runner, got well away. Clarke, Preen and Boyle were all taken in with a fine swerve inwards, which no tackler could well have stopped, and Moore scored in an easy position. Strangely, he failed with the kick. A little later Arbuthnot ran through our defence and handed to Moore to again score. This time Chantrill converted. We never got going this first half, and soon the rain commenced.

On changing ends the wind dropped and the rain increased. We had it now at our backs. It was miserable work for both teams. Handling was almost out of the question.

The forwards now kept the Park men to their end. We were on top, yet we could not score. Sometimes we passed, sometimes punted obliquely; methods of attack varied, but never really looked dangerous. One strong rush the Park made, dribbling from one end to the other. Barnes eventually saved. Then came our only success. Richmond dribbled for Wilkinson to take it on; then a misfield by the home defenders saw the ball over the line and Clarke ran up to secure the touch. Radford could not kick the ball the distance. It was a little unfortunate for us that the rain should have come as soon as our pack asserted itself.

Result—Rosslyn Park, 1 goal, 1 penalty goal, 1 try (11 points); Guy's Hospital, 1 try (3 points).

Guy's Team—V. G. Boyle; G. J. Clarke, R. F. Wilkinson, F. H. B. Spence, A. J. D. Lewis; J. Barnes, V. R. Preen; W. H. Myburgh, J. R. F. Popplewell, J. H. Cullinan, L. Brown, C. D. Malone, J. D. Radford, J. H. Richmond, D. S. Clogg.

Senior and Junior Kent Cup.

ON April 2nd, at Blackheath, Guy's A and Guy's Extra A play in the Finals of the Senior and Junior Kent County Cup Competition. Will any Guy's men and Guy's supporters that possibly can do so turn up at the Rectory Field and cheer these teams on to what we hope will be a double victory?

The teams are playing for the honour of the Hospital, and those who cannot represent our Hospital can at least do their utmost by attending and encouraging their representatives.

Junior Kent Cup

Semi-Final

Guy's Extra "A" v. R.A.F. (Manston).

THE Semi-Final of the Junior Kent Cup was played at Manston on Wednesday, March 9th, 1927.

Guy's won the toss and kicked off up a slight slope. After about fifteen minutes' play, in which both packs of forwards showed to much advantage, Eustace got the ball away smartly from a line out and a bout of passing ensued, which finally ended in W. M. Smith scoring. The try was not converted.

Soon after this the R.A.F. right wing got the ball from a loose scrum and scored near the corner flag. They followed up this success a few minutes later by obtaining a drop goal.

At half time the scores were R.A.F. 7 points, Guy's Ex. "A" 3 points.

Up to half time Guy's had been playing a forward game with no great success, as the R.A.F. pack were superior in the loose. In the second half Guy's got the ball back to great advantage, several good passing movements being initiated, one of which resulted in Garrett receiving the ball on the right wing. He then cross kicked cleverly and J. W. H. Jones, being well up as usual, caught the ball and scored between the posts.

Later, Garrett received a nice pass from Littledale and after a good run scored a further try.

Guy's were now pressing hard and Clegg, working the blind side of the scrum to much advantage, scored a fine try.

A few minutes before the finish Van Niekerk dribbled the ball up the field and beat the opposing half back. J. W. H. Jones with much dash then picked up the ball, handed off one of the defence, and finally scored between the posts. The last two tries were both converted.

Altogether, Guy's played a very sound, hard game, the forwards doing exceptionally well in the second half.

Result—Guy's Ex. "A" 19points; R.A.F., Manston, 10 points.

Guy's Team—Balding; Garrett, Littledale, W. M. Smith, Cautley; Clegg, Eustace; Williams, Plummer, Pitt-Payne (capt.), Druce, Freeman, M. Davies, Van Niekerk, J. W. H. Jones.

The Nomads v. The Junior Staff.

THE Junior Staff must, in all conscience, desist from marriage or the annual fixture *v.* the Nomads will have to be cancelled. Reformed recently married or affianced young men are not treated with charity if they return home distorted by infuriated members of the firm. It becomes necessary to preserve one's physical beauty. One shamefaced husband tried to divert his wife's attention from a hideous hæmatoma of the eye with "Ginger's" bouquet of scarlet tulips. The dialogue ran somewhat as follows: "Here, my dear, I hope these will blend with the wall paper." "Oh, how perfectly wond—— Whatever have you done to your eye!" We all know that this is not good enough.

The match was played before some hundreds of violently enthusiastic spectators. The Soccer team need be under no misapprehension as to the real attraction. It was fully expected that the Junior Staff, having only one regular supporter —Prof. T. B. Johnston—available, would suffer an outrageous indignity from the strong Nomadic side. Fortunately, the Dean played the game of his life, consistently covering many mistakes by his colleagues. The ball had only been slithering for some minutes when Doherty, seeing Baird's friendly face some yards nearer the opponents' line than he himself could hope to reach, cast an exquisite paraboloid. The ball landed safely in Baird's arms, and with the Dean's unerring support a pretty try was made. Four more such fantastic scenes, each worthy to be made a ballet in the *Chauve Souris*, resulted in tries, and in turn they became muddier and less elegant in execution. For at least one of these considerable credit must be given to the Nomads. I am convinced that M. Diaghelieff has never conceived such weird perambulations of the mammalian limbs as those of Russell, Ettles, Fitch and Theis during this virile interpretation of *le balle en passant*. We regret that no conversions were registered. Our Rugger expert was heard to remark that the mud coated spheroid made the technique of placing it between the uprights far from simple.

The casualties during this half were of a minor nature Keith-Williams and Signauwsky had cut foreheads, entirely due to their own excited state. Owen was sufficiently concussed not to remember anything that had happened, and Close was lacerated on the back. The latter lesion has been confirmed by his wife in no uncertain phrase. So far, Mill had managed to evade Doherty's famous *embrace au passion*.

During the interval Baird disgraced himself. A small boy in a clean white shirt accidentally wandered on to the pitch. This, for some obscure

reason, maybe an old "Abido," infuriated Baird, and the small boy paid the penalty.

During the second half the mud veered round and overcame the Junior Staff. Only twice did they look like scoring. Macintosh, after a brilliant run, suddenly stopped to adjust an internal semi-lunar cartilage. On the second occasion Keith Williams ran half the length of the field in complete solitude, placed the ball on a carefully chosen spot, and returned beaming. Dr. Conybeare, however, timidly waved his flag and suggested to the Dean that there had been cheating. This yellow streak of honesty has been noticed before in the Warden's character. We are agreed that something must be done.

The Nomads made many determined forward rushes, but always submissively gave the ball to their seniors when a yard or so from the line. We regret this lack of stamina and independence in our future great men.

Doherty took us back to childhood. What a boy he must have been for the sands! He would firmly clasp that rugger ball, squat down in the mud, and bellow with joy. Dr. Martin (née Ginger) thought this great fun and persistently sat down beside George, and the two would indulge in pungent Irish "back chat."

By the finish of the play most of the Junior Staff had sustained one or more serious injuries, and two of Doherty's dressers had qualified for C2 sign-ups.

Mr. Fagge should restrain his amusement at the indignities to the person of his late Registrar.

The dinner was held at the Bridge House. Mr. Thompson, having watched the red Hare and Hounds during the afternoon and given a sop to his conscience, arrived in great fettle. His speech contained many a pretty and witty turn of phrase. As the outcome of one remark Dr. Martin is giving up medicine and planting a fig plantation in Hawaii. Neither the aforementioned remark nor the remainder of the dinner can face the light of publicity.

Hockey.

Inter-Hospital Cup.

Semi-Final.

Guy's v. Bart's.

IN the Semi-Final of the Inter-Hospital Cup, Guy's defeated Bart.'s by 6–1. The first half was fairly even, only one goal being scored, and this by Guy's. It was during the second half that the forwards showed their best combination of the season; they completely overran their opponents and piled on five more goals. The only goal got by Bart.'s was scored towards the end. The team as a whole played an extraordinary good game, and are to be congratulated. It is hoped that this good form will prevail in the Final with St. Thomas's on March 28th.

Guy's Team—R. E. Smith; F. E. Camps, G. N. Carrell; C. N. Howitt, G. E. Willett, R. A. Sykes; A. H. Curtis, R. L. Cautley, C. A. W. Archer, R. Catchpole, H. O. Lyne.

Inter-Hospital Boxing Competition.

THE Competition opened with the first bouts of the Welter Class, C. W. Harrison of Guy's *v.* Raphael of Bart.'s. Raphael won this, finishing very strongly.

The next to take the ring were the Feathers, with J. G. Weston representing Guy's *v.* E. G. Darke. Weston had not the condition of the Bart.'s man. The three bouts were full of go. Weston stopped some solid punches, but was outpointed.

In the Middle Weights, G. Calhaem met C. A. Hodges of St. Thomas's. This looked a very even fight, Calhaem getting the decision. In his second visit to the ring he met L. M. Coultre of Bart.'s, who administered a knockout in the first round.

In the Fly Weights C. V. Harris of Guy's met Q. F. Evans of St. Thomas's. In the first round Harris hurt his ankle, but carried on, doing nearly all the attacking and scoring points. In the second round Harris made a furious onslaught, but the pace was too fast to last, Evans covering up to save himself. The third round Evans weathered the storm by again covering up. In the final Harris gained a decision against L. J. Hackett of Bart.'s.

The Light Heavies were the pick of the Competition. R. N. C. Smith was a very worthy upholder of Guy's colours. His first encounter was with J. Darvel of London. In the first round Smith severely shook Darvel who, however, pulled himself together and made a fight of it in spite of a damaged eye. The second round was similar, with Smith still on top and punishing Darvel's eye. The third round saw a continuance of the punishment.

The final bout of the Light Heavies, with Smith against A. J. Melly of Bart.'s, was the best of the whole evening. Smith stopped some very hard knocks, but paid back generously to Melly's body and face. Smith's good condition saved him from defeat in this round. The second round was a very vigorous one, Smith scoring well, but Melly landed a very fine hook at the end of one of the exchanges. In the third round Melly was done, but Smith could not land a K.O.

In the Heavies C. D. Malone met C. B. Drew of St. Thomas's. The first round was rather tame, both men seeking an opening. Malone did most of the attacking, whilst Drew was on the watch for a K.O. In the second round Malone mixed it, and the round finished very evenly. In the third round more mixture by Malone. This looked like a verdict for him, but Drew had in the first two rounds piled up enough points to secure the decision.

The final score was :

	Points
St. Thomas's	19
St. Bart.'s	14
London	14
Guy's	13

St. Thomas's therefore hold the Cup for the coming year—just till Guy's retrieve it !

United Hospitals Hare & Hounds.

Kent-Hughes Inter-Hospital Cup.

THIS race was held at Hayes on March 9th over the 7 miles course. The weather was ideal and, considering the rainfall of the last few weeks, the course was in fairly good condition.

It was obvious that there would be keen competition between King's, Bart.'s and the London, and the latter beat Bart.'s by a margin of only 6 points. Guy's, who had rather a weak team, really did better than was expected.

A tremendous pace was set at the start, Macbeth (King's) taking the lead for the first $\frac{1}{4}$ mile. Varley (Bart.'s) then overtook him and led for the rest of the way, gradually leaving May (London) —the second man—further and further behind. He eventually won by a margin of $2\frac{1}{3}$ minutes, thus setting up a record for the course. Varley is particularly to be congratulated on his splendid time, since he was not at all pressed by the next man. The times altogether were exceptionally good.

May also ran extremely well ; he was second all the way round until Horsley (London) caught him up about a quarter mile from home, when they ran together for the rest of the way. Way was the first man home for Guy's, and he was followed closely by Calhaem. The latter ran very well considering he had only been down once during the season and had been boxing on the previous evening.

The race was timed and judged by Dr. Munro (President), Mr. A. R. Thompson (Vice-President) and Mr. J. E. Fowler-Dixon.

In the evening a very successful Annual Dinner was held at the " Boulogne " in Gerrard Street, when Dr. Munro presented the Cup to Horsley, the captain of the London team.

The order in the race was as follows :—

		m.	s.
1.	J. F. Varley (Bart.'s)	41	15
2.	G. W. May (London)	43	35
3.	J. S. Horsley (London)	43	35
4.	E. J. Somerset (King's)	43	47
5.	R. G. Macbeth (King's)	44	8
6.	W. J. Walter (Bart.'s)	44	53
7.	M. P. Way (Guy's)	45	2
8.	T. M. Calhaem (Guy's)	45	12
9.	G. H. Evans (London)	45	25
10.	L. A. H. Snowball (King's)	45	46
11.	R. R. Race (Bart.'s)	45	$46\frac{2}{5}$
12.	T. A. R. Callendar (London)	46	1
13.	R. G. West (Bart.'s)	46	6
14.	W. S. Pitt-Payne (Guy's)	46	18
15.	H. A. Eason (London)	46	54
16.	H. N. Walker (Bart.'s)	47	15
17.	R. A. Q. Lay (Guy's)	47	19
*18.	C. H. Forsyth (London)	47	54
19.	H. G. McComas (Guy's)	48	2
*20.	E. R. Greathead (London)	48	5
*21.	A. J. D. Lewis (Guy's)	48	$5\frac{2}{5}$
*22.	S. C. Brown (Guy's)	48	46
*23.	J. E. Snow (Bart.'s)	48	55
24.	C. Orme (King's)	49	1
*25.	D. A. Langhorne (Bart.'s)	49	38
26.	T. Taylor-Jones (King's)	49	39
*27.	P. G. Stainton (Guy's)	51	15
*28.	R. C. Brock (Guy's)	52	38
*29.	L. Fitch (King's)	61	35

Those marked with an asterisk did not count in the team placings.

		Points
1.	London, 2, 3, 9, 12, 15	41
2.	Bart.'s, 1, 6, 11, 13, 16	47
3.	King's, 4, 5, 10, 19, 20	58
4.	Guy's, 7, 8, 14, 17, 18	64

Tennis.

NOW that the weather shows definite signs of improvement, it is to be hoped that all those interested in Lawn Tennis will take the necessary steps to get fit for the coming season. Many of last year's team have now left the Hospital and there will be many vacancies to be filled. Trials, on the Hard Courts, will be held in April, and it is expected that by then all the old members will be in good form. A list will be posted shortly in the Colonnade, and it is to be hoped that it will soon be filled with names of those intending to take up the game seriously during the summer.

We hold the Cup, and must go all out if we are to make up for the talent we have lost from the team which won it last year.

I hope the Hard Courts, in the near future, will be filled more frequently with ambitious players.

G. M. HOUSDEN, *Hon. Sec.*

Hospital Information, etc.

Pass List.

First Examination.

February, 1927

PART I

Dental Mechanics

I. C. Fisher
F. Allott
J. G. T. Edmonds
O. M. H. Jones
C. E. W. Kurtz
D. S. H. Williams
H. S. Gare
E. E. Irish
F. F. Kennedy
C. D. Malone

PART II

Dental Metallurgy

I. C. Fisher
H. M. Crombie
G. R. G. Druce
J. A. C. Hunter
E. A. Mayston
R. O. Murray
D. S. H. Williams
W. H. Dodd
A. J. D. Gibbings
O. Lyth
K. C. Moss
W. R. J. Wood

PART III (*a*)

Anatomy and Physiology

K. S. Morris
C. G. Baker
A. F. de Villiers
W. D. P. Evans
D. C. Glenny
E. S. T. Lee
H. C. Norman
G. B. Palmer
W. H. H. R. Smithurst
G. H. Weir
R. C. Wiles
I. C. Wilson
F. H. B. Spence
L. E. A. Dearberg
E. M. Douglas
A. M. Garman
H. R. Heathcote
C. D. Malone
C. A. Palk
K. P. Smith
A. G. Taylor
R. J. Wheatley
D. S. Wilson
C. J. Woodcock

PART III (*b*)

Dental Anatomy Physiology

K. S. Morris
D. C. Buckley
M. L. Cooper
L. W. G. Fisher
C. S. Henderson
W. W. Levy
C. W. Pound
W. J. Scoble
A. W. G. Small
F. C. Tomlyn
H. Winter
M. G. Berry
B. Cohen
S. P. Ellis
G. E. Hansen
L. E. James
H. O. Lyne
L. R. Rowlands
W. H. Shrigley
J. T. T. Tingle
H. C. J. Van den Broucque
S. F. Wright

University of Oxford.

M.B., B.Ch.

Medicine, Surgery and Midwifery

F. Parker
W. Read

Pathology

J. K. Marshall
L. T. Ride

L.D.S.

Final Examination.

February, 1927

PART I

L. E. Balding
J. D. Bowling
E. J. Dalling
E. M. Greenwood
C. S. Laurens
G. H. Billison
W. A. Corry
T. G. Emberson
F. S. Hobbs
S. D. Marcus
E. N. Stevens
T. T. Wilkinson
N. C. Yendell
E. Britstone
H. E. S. Collingwood
A. H. Herbert
C. J. O'Donoghue
R. T. Towne
R. W. Waldie
H. T. J. Willis
H. A. Ginn
T. M. Calhaem
R. L. Dale
H. M. Norman
J. R. Prior

PART II

L. E. Balding
J. D. Bowling
T. G. Emberson
S. D. Marcus
R. W. Waldie
H. F. J. Willis
C. H. Bandy
S. I. Cohen
R. L. Duchesne
V. L. L. Hall
G. J. Hollis
T. W. Watts
C. H. Woodham
G. H. Billison
W. A. Corry
C. S. Laurens
E. N. Stevens
T. T. Wilkinson
N. C. Yendell
R. L. Cantley
A. C. Davies
A. E. Grace
J. H. T. Hilton
W. H. G. North
M. Welman

The Services.

R.A.M.C.

Army Dental Service.

Temporary Lieut. W. G. Bradbeer, Dental Surg. Gen. List, to be Lieut.

Royal Naval Medical Service.

T. R. C. Spicer to be Surg. Lieut.

Acting Surg. Lieuts. to be Surg. Lieuts: W. E. L. Brigham, F. D. Manners, W. C. G. Ford.

Papers by Guy's Men.

Arthur F. Hurst, M.D., F.R.C.P. Treatment of Achalasia of the Cardia, *Lancet*, 1927, i, 618.

H. St. Vertue, M.A., B.M., B.Ch. The Infantile Factor in Failure of Breast Feeding, *Arch. Dis. Child.*, 1927, II, 26.

H. C. Cameron, M.D., F.R.C.P. Ketonæmia, Cyclical Vomiting and some Nervous Disturbance in Children, *Ibid.*, 55.

Appointment.

W. Shirley Kidd, M.B., B.S., to be Hon. Physician to The Royal Bath Hospital, Harrogate.

Change of Address.

James B. Hine, 51, David Place, Jersey, C.I.

Birth.

MILLS.—On December 26th, 1926, at "Pentrich," St. James, South Africa, to Mr. and Mrs. Rupert B. Mills (née Gerrard), a daughter.

Deaths.

CLOWES.—On March 12th, 1927, at Colchester, Francis Clowes, M.R.C.S., L.S.A., J.P., aged 91 years.

MUSPRATT.—On March 10th, 1927, at Madeira Road, Bournemouth, Charles Drummond Muspratt, M.D., F.R.C.S., aged 68 years.

EDS. { P.F.S.C.
G.M.H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *April 9th, 1927.* *Number 1010*

PASSIM

WHEN the current of present events runs monotonously there remains only the relief of looking forward or back to days, if not fuller of incident, at least different. This has been the privileges of chroniclers from the time when the first bard relieved the boredom of some prehistoric social gathering by the recitation of great deeds "wrought in ancient days." Moses, exercising his gigantic imagination, no doubt in an interval of unusual peace among the Children of Israel, roamed back through the past to the Beginning and visualised a striking scene that has held the attention of men without number. And who knows with absolute certainty in a world of imagination that the amœba, amphioxus, reptile and ape theory of descent will not in some distant time ahead be regarded by scientists of the time as an ingenious hypothesis founded on insufficient data.

Prophets without number have peered shortsightedly into the future and, using their experience of the past—such as it is—have painted joyous pictures and drab for the pleasure or boredom of their fellows. Among the newest of the prophets are the scientist and medical man—who is not wholly scientist, but more often an oracle with the Delphian gift of ambiguity.

It is tempting to prophesy after some unusually myopic glance into the fog that lies over tomorrow, and the extent to which the prophecies are influenced by the immediate circumstances is astonishing.

The convictions of the Eugenist, often expressed forcibly to the horror of some individual of the "Ford car" category, conjure up visions of relentless diagnosticians stalking through the land with concentrated death in hypodermic syringes—instead of perhaps insulin—and eliminating the unfit with the subsequent production of a race of supermen of purring efficiency and higher fuel consumption, a nation without poets and artists, with brains full of "divine discontent," which is perhaps a tinge of the "black bile" or colonic toxins.

The enthusiasms of the actino-radio therapeutist cause a vision of a world without pathogenic bacteria, all of that degree of life having been exterminated by specific rays for each germ. An era in which sex feminine will go to fancy dress balls as nurses as do those of to-day go as cave women or ladies of Ancient Greece.

A dinner with a general practitioner produces visions of the less remote future of the practice of those who are the backbone of the country's medical service.

The day of the one man practising alone is surely disappearing, for to keep abreast with advances in each of the branches of medicine and surgery and engage in active practice is surely an impossibility. We see all over the country, in place of the brass plate indicating one or perhaps two doctors, clinics equipped for the thorough and periodic examination of everybody. These clinics, possibly run by the state, will be in direct touch with the larger hospitals, where the more complicated investigations and operations will be done and most of the teaching of students will be carried out. Students will, however, receive courses at the smaller clinics, where they will learn about the type of patient that is met outside the larger hospitals.

The periodic examination of every one—as a car is regularly overhauled—will add tremendously to the knowledge of the earliest symptoms of disease. Too often now the appearance of a symptomless man causes a flicker of annoyance, perhaps because of the ordinary pressure of work and the feeling that the doctor's job is "to heal the sick" and not to comfort the healthy.

THE recent Hume Spry case has again called attention to the occasional unpleasant task, with the possibility of more unpleasant sequelæ, that falls to the lot of the medical profession. That members of the profession should be liable to all the discomfort and loss of legal proceedings after performing a public duty seems an injustice which, with many eminent comtemporary medical journals, we deplore. It seems to us that the onus of deciding whether a person be of unsound mind should rest on the shoulders of State appointed experts, since the restraint of lunatics is in the interests of the State.

Two more Cups were brought to the Hospital last Saturday by the A Rugby XV and the Extra A, these two teams winning the Senior and Junior Kent Cups respectively, and we congratulate them most heartily. Their success gives hopes of a high standard of "rugger" in the 1st XV in seasons to come.

THE following have been appointed Clinical Assistants for the period April 15th July 16th :— Messrs. S. Carnofsky, E. Clayton Jones, A. B. Kettle, W. Leslie, F. G. Parker, W. R. C. Spicer.

THE Examination for the Newland-Pedley Gold Medal for Operative Dentistry will commence on Monday, April 25th, 1927.

Students who desire to compete for this Examination are requested to forward their names to the Medical School Office on or before Monday next, April 11th, 1927.

THE Guy's '89 Club will hold their 31st Annual Dinner at the Hotel Cecil on Wednesday, May 13th, at which Dr. G. L. Eastes will preside. Further notices will be sent out in April.

The Treatment of Pain in Dental Practice.

A Paper read before Guy's Hospital Dental Society by C. A. TOMES.

GENTLEMEN,—I have purposely titled my paper the treatment of pain in dental practice because, indisputably—of the vast number of operations peculiar to dentistry—nearly all are, to the average patient, to some varying extent painful.

Such phrases as the nightmare of the visit to the dentist, the cold shudders of the drill, the merciless tug of the forceps, etc., all go to prove that patients fear the dental chair on account of the pain which so often accompanies their visit.

For years and years the necessity and demand for painless dentistry has been steadily increasing and, moreover, will still increase as the years go on. The dental patient has a right to undergo dental treatment painlessly, for this, to all practical purposes, is possible, and therefore it is obvious that to satisfy the desires of the patient with regard to painless treatment should be one of the highest —if not the most important—of ideals the dental practitioner should possess.

Pain may be caused in many ways. A patient may come complaining of existing pain, or whilst undergoing dental treatment the patient may complain that pain is being caused.

I propose therefore to deal with the subject under two headings : (1) The treatment of pain present when the patient consults you, and (2) The treatment of pain arising whilst the patient is undergoing treatment.

First, allow me to give you a brief outline of the most usual conditions causing pain, and then I will deal with each in turn.

The most common causes of pain present when the patient consults you may be summed up as follows :—

(*a*) Irritation from dental caries.
(*b*) Inflamed and exposed pulps.
(*c*) Exposed cementum or dentine.
(*d*) Swellings, abscesses and cysts.
(*e*) Diseased conditions of the gums, mouth and periodontal membrane.
(*f*) Unerupted and impacted teeth, buried roots, injuries and pain arising from dentures.

Whilst the patient is in the chair and dental treatment is being performed, pain may arise from a few definite causes :—

Conservative operations such as
- (*a*) Cavity cutting.
- (*b*) Pulp extirpation.
- (*c*) General technique.

Operative work such as
- (*a*) Extractions and gum incisions in general.
- (*b*) General technique.

Relief of Pain Present when Patient Consults You—

All types of people are met with in this condition of different temperaments and characters—the nervous, the strong, the rough, the dainty, old people and young people—so different in many

ways, yet in this one thing they are all alike, and it must be borne in mind that, although the treatment for them may be similar, the handling and method of giving the treatment varies tremendously and must be suitable for each particular case. Nervous irritability is greater in some persons than in others, females possessing a larger share than males. Strain on the nerves resulting from an aching tooth may be increased through some illness, some mental or physical shock, overwork of mind or body, and thus not only should the tooth be suspected and treated, but these other possible causes investigated and remedied.

A careful and systematic examination of the mouth, aided often by the patient, who can generally locate and describe the pain, will generally reveal the cause of the trouble. Sometimes, however, a very careful and skilful search must be made before the case may be diagnosed. At this point I would stress the absolute necessity for a careful and complete diagnosis to be made for all these troubles; there is nothing better than an accurate diagnosis to help solve the present difficulty and experience one for future cases.

Let us suppose a carious tooth is found giving rise to great pain, especially at night. The patient experiences paroxysms of pain on drinking cold water or hot tea, he has had little sleep for some nights, he is going out to a special affair this night and insists either on having the tooth out or something done to ease the pain.

Temporary relief can be obtained by carefully removing as much carious matter as possible and inserting on a small pledget of cotton wool oil of cloves, carbolised resin or gum mastic.

If worked up with a small quantity of zinc oxide and then inserted, a substantial and sedative temporary dressing is produced which will last until the patient can conveniently attend next.

When it is found that the caries has penetrated so deeply as to expose the pulp, the cavity should be cleaned of all removable debris and then carefully syringed with tepid water, to which soda bicarbonate has been added—1 drachm of the powder to 1 fluid ounce of water. This produces an alkaline liquid which is capable of neutralising the acid condition of the disorganised dentine. If then some warm concentrated carbolic acid be applied on cotton wool for a few minutes the pain will subside, and, if the immediate devitalisation of the pulp is inconvenient, a loose zinc oxide and carbolised resin dressing inserted upon this will be quite satisfactory temporarily.

As you know, inflammation of the pulp—pulpitis—is the most common result of all forms of irritation to the pulp of whatever nature—whether mechanical, chemical, septic or nervous—and it may occur with or without perforation of the pulp chamber.

The treatment of the pain resulting from pulpitis consists in first freeing the carious cavity of all foreign matter and debris, then irrigating it with the alkaline solution as described before. Then the cavity should have a temporary loose dressing inserted to allow the inflammation to subside where possible. Devitalisation generally is necessary and where the pulp is definitely inflamed and exposed—*prior to devitalisation*—if the pain demands it and the tooth cannot be devitalised at once, applications of a paste consisting of :—

Morphine sulphate, 1/10 gr.,
Atrophine, 1/100 gr.

dissolved in oil of cloves to make a paste, or of Cocaine Hydrochlorate dissolved in glycerol to form a paste, are very helpful to alleviate the pain, and are best used when sealed into the cavity with zinc oxy-phosphate cement.

Conjestion of the pulp is often relieved by use of the counter irritation when the blood causing congestion is drawn to the surface and thus away from the congested area.

Capsicum plasters applied to the gum over the affected tooth will accomplish this, much in the same way as leeches.

By far the simplest and yet expeditious remedy is the use of tincture of aconite and iodine.

The treatment of pain resulting from exposed cementum or dentine is, generally speaking, by some method of obtunding sensation of nerve fibrils by coagulation of the albumen present in those tissues.

Silver nitrate will produce this effect, but, owing to its staining power, its use is limited to the posterior teeth, when it can be rubbed over the exposed surface in the form of a bead of crystal silver nitrate, mounted on the end of a probe kept for this purpose. *Zinc chloride* is another satisfactory agent for use; it does not stain, hence it is serviceable for attention to the anterior teeth as well.

An excellent form of treatment for such exposed and sensitive surfaces is to prepare a paint which the patient is directed to apply with a camel hair brush to the painful area after drying it, and allow it to harden. The following is the recipe :—

R/

Gum mastic, powdered, dr. i.
Zinc chloride, gr. v.
Chloroform, ½ oz.

Misc—To be used as directed as a paint.

At this point I would remind you that these are methods of treating *pain* connected with these conditions and troubles, and do not by any means clear up the condition itself. Conservative work is nearly always necessary in the later stage.

In dealing with the pain arising from swellings I am merely touching on swellings such as abscesses and cysts, these being the commonest of swellings met with in an ordinary practice.

Pain from an acute alveolar abscess in its early stages is similar to that of acute septic apical pericementitis, but on formation of much pus the symptoms gets worse, the gums become inflamed, the pain is of a deep throbbing character, often almost intolerable ; rigor and chilly sensations are experienced, lasting often for hours.

The immediate treatment to alleviate the pain is to obtain access to the pus and evacuate it ; this reduces the pressure in the surrounding tissues.

Marshall's saying, "Ubi pus ibi evacuo" ("where there is pus evacuate it"), is as wise a surgical rule to-day in the treatment of acute abscesses as when it was first enunciated centuries ago. A safe rule to follow in all cases of acute alveolar abscess which have not yet pointed is to apply the knife and give immediate exit to the accumulated pus, for by so doing great relief is afforded the patient, whilst the destruction of tissue is thereby limited and the danger from general septic infection are greatly reduced.

The operation of removing the gangrenous pulp may be necessary, and the whole seat of infection thoroughly cleansed of all infectious matter.

If the abscessed tooth is to be removed bear in mind that it is the presence of the pus that generally causes the pain, and therefore when the tooth has been removed, and whilst the patient is still under the influence of the anæsthetic, squeeze out as much pus as possible from the socket.

Next to hyperæmia and inflammation of the pulp, periodontitis is the most prolific cause of toothache. It therefore calls for a careful study of its pathology and symptoms that it might with certainty be diagnosed and treated.

The pain accompanying periodontitis is a gnawing, uneasy feeling of tension in and about the tooth, with a desire to bite on it. The tooth stands higher in its socket than its fellows and is slightly loose.

The surrounding gums become painful, inflamed and tender. Later on, pain increases and any percussion to the tooth will cause intense pain, whilst biting on the tooth is intolerable.

The treatment here is threefold.

If there is any definite cause such as mal occlusion, ill-fitting plates, clasps or crowns, fillings left too high, salivary calculus, etc., such cause should be removed. Very often this itself is rendered difficult because of the acute tenderness of the tooth to the touch ; if, however, some softened modelling composition is moulded round the tooth and those next to it, it will steady the tooth and thereby greatly diminish the inconvenience.

Next, rest must be given to the painful tooth by preventing its opposing tooth from occluding with it. This may easily be performed by any means capable of opening the bite. One of the simplest and yet efficient methods is to dry the occluding surfaces of two or three teeth on the same side of the mouth as the offending tooth and cover them with a fairly thick layer of zinc oxyphosphate cement.

Thirdly, relief of the local congestion by counter irritants. The following combinations of remedies form a very good application for all cases requiring counter irritants :—

R/

Tincture of aconite.
Tincture of iodine.
Spirit of chloroform.
Spirit of camphor.

Equal parts by volume. The Application.

Frequently pain is experienced in the process of the cutting of children's teeth, and with the erupting third molars in adults.

Where much pain is present in the conditions, due nearly always to inflamed gum overlying the erupting tooth, the lancet should be used to assist Nature by incising the gums and thus relieving the tension. In addition, if the patient is capable of using a hot mouth fomentation the decoction of poppy heads is recommended as a local anodyne.

Pain from impacted teeth—lower third molars, buried roots and such like—apart from radical treatment, will be relieved to some extent by the use of general sedatives and local applications.

Prinz states that pain arising from certain forms of acute alveolar abscesses and difficult eruption of a lower third molar may call for the use of morphine—$\frac{1}{8}$–$\frac{1}{4}$ gr., injected hypodermically—which is the supreme analgesic, and will reduce the most persistent and unbearable pain.

I am not going into the details of pain arising through dentures or roots left in edentulous jaws, since the subject is very wide, but there are more cases of pain arising from these conditions than many credit. The old notion that the cleared mouth can give rise to no pain is wrong nowadays.

Injuries to the teeth, so far as they are likely to be met with in an average practice, generally are the result of a fall or blow, and are the most commonly found concerning the upper incisors.

Pain from such injuries may be due merely to a fracture resulting in exposing sound dentine. This may be treated as described before, whilst a metal cap can be cast and cemented to the tooth to prevent further pain and irritation of the pulp.

If, however, the pulp is involved it should be removed at once, a local or general anæsthetic being administered for this purpose.

When there is a doubt as to the extent of the fracture an X-Ray should be taken so as to make certain.

Constitutional treatment, together with local dental treatment, is considered by some out of the scope of a dental surgeon, but in connection with the alleviation of pain it should play a very important part. In cases of hyperæmia and inflammatory conditions of the dental tissues hot water bags are very soothing applied to the side of the face.

Great relief is often obtained by the use of a hot foot bath, to which a tablespoonful of mustard has been added; this equalises the circulation by causing a determination of blood to the lower extremities and relieves arterial tension in the upper part of the body, and by that process mitigates the pain.

For patients who have suffered much pain and had little sleep and rest, after treating the patient locally it is often of invaluable assistance to prescribe some general analgesic.

There are many preparations on the market, all of which doubtless are of great value. Of them all, however, aspirin and phenacetin prove the most efficient.

The bromides of potassium or sodium are also very useful; up to 30 grains in a fluid ounce of cinnamon water will generally be sufficient to sooth the nerves and provide a good night's sleep.

For neuralgia a general prescription can be given containing 5 grains phenacetin and 10 grains sodium bromide, this dose to be repeated every three or four hours until its sedative action is experienced.

Chloral hydrate is another very satisfactory drug for a sleeping draught. It may be prescribed as follows:—

R/

Chloral hydrate, 2 drs.

½ oz. each of syr. limonis and aqua.

Misc. 1 teaspoonful in half a glass of water 1 hour before going to bed.

For facial neuralgia the following prescription is beneficial:—

R/

Butyli chlori hydrati, ½ dr.

Syr. limonis, ½ oz.

Aquam ad, 2 oz.

Misc. teaspoonful in half a glass water, followed in 10 minutes by second dose.

I now come to the second part of the subject, namely:—

The Relief of Pain Experienced whilst the Patient is under Treatment—

When a patient is in the surgery and is receiving treatment one of the most disconcerting things that can happen, both to the patient and to the operator, is the causing of pain in any way.

Most frequently it is whilst cavities are being prepared that such pain is caused, and because of it many patients dread the filling more than the extraction of teeth.

During the cutting of a cavity, if pain is noticed, the reason must be sought for. Here are several of the possibilities:—

(1) The patient may be nervous and shrink at the slightest touch.

(2) The base of the cavity may be very near the amelo-dentinal junction.

(3) The base of the cavity may be very near to the pulp.

(4) The tooth and patient may be naturally hypersensitive.

The treatment of nervous people is often almost heartbreaking, but often by a sympathetic and encouraging manner the confidence of the patient may be gained and the preparation of the cavity proceeded with.

But by a display of harshness in the methods of operation or an exhibition of irritability of temper, or an unsympathetic mood on the part of the operator, apprehension, dread and nervous excitement are increased and the difficulties of controlling the patient augmented.

Certain drugs such as pot. brom., administered to the patient before the visit, frequently render valuable service in reducing the nervousness of hypersensitive people.

Some authorities favour the administration of brandy before commencing on such a difficult patient; a teaspoonful in a wine glass of water is the average dose.

Occasionally the junction of the enamel and dentine appears to be hypersensitive. It is accepted without doubt now that the nerve fibrils from the dentine ramify freely within this junction and that under normal circumstances an instrument such as a bur or excavator when cutting into this junction, will cause slight pain. If, however, the bur is run at a high speed and sunk below this junction rapidly, and then further cutting be directed parallel with this region, little or no pain is experienced beyond the initial twinge as the bur sinks through. Sometimes, however, this twinge is far more painful than the word is apt to suggest. In such circumstances applications to the cavity or a local anæsthetic may be necessary.

Parfitt recommends the use of sodium ethylate liquid in full strength; the rubber dam is necessary because of the mobility and caustic action of this drug.

In the same way zinc chloride may be used. Both these medicaments must be used cautiously, and though in many cases the pain is relieved, some will not respond to this treatment, whilst others are even caused extra pain and aching by the mere application. In view of this uncertainty

it is far better to steer clear of such possibilities and either insert a dressing for a while or perform the cavity preparation under the influence of a local anæsthetic.

In cavities where caries has well extended into the dentine the operation of excision often results in the cavity becoming so deep that there remains but a thin layer of dentine above the pulp. Sometimes pain is absent or slight, though the tooth is not dead, and provided a good layer of zinc oxide and oil of cloves is placed in first the tooth may be safely filled.

Very often, however, the patient shows marked signs of uneasiness—so familiar to us—upon excavating in this region, and if conscience—or a house surgeon—tells us we must go on cutting, the pain generally increases to such an extent that its treatment is necessary. Sedative dressings may often be inserted for a period of months in the hope that the tooth will lay down secondary dentine and thus permit of the proper carrying out of the preparation of the cavity.

Here are some of the most useful sedative dressings :—

(1) Zinc oxide and oil of cloves or "Eugenol" with a little powdered silver nitrate.

(2) Zinc oxide, carbolised resin—mix into a paste, then add 1–2 drops "Eugenol." This mixture sets hard in about one minute and is very satisfactory as a sedative dressing.

(3) Zinc oxide mixed with two parts carbolic acid and 1 part oil of cloves also sets hard quickly, and has a very efficient effect used as linings to the floor of cavities prior to fillings.

In shallow cavities and, as mentioned before, in the region of the amelo-dentinal junction, paraform mixtures may be tried to alleviate the pain. Up to 10 per cent. paraform, with zinc oxide and oil of cloves, is the usual preparation. However, since the paraform has a habit of quickly reaching the pulp and doing it irreparable damage, its use must be very carefully guarded, and if any doubt exists do not use it.

When dealing with the pain arising in connection with cavity preparation in teeth which are abnormally sensitive, all the methods described above may be tried, but unquestionably all of them are very doubtful; and not only that, but repeated dressings and extra appointments are tedious both to the patient and to the operator, and thus by far the easiest solution to this and to many of the former difficulties is to inject an anæsthetic in a suitable region, thus paralysing the nerves supplying the tooth or teeth to be operated upon; then cavity preparation can proceed quite easily and painlessly.

A word or two regarding pain from the operation of devitalisation. Such pain is prevented to a large extent by the combination of certain drugs in the mixture used for the purpose of killing the pulp.

Arsenic, generally used in the form of its trioxide as fibre or paste, if uncombined would grossly irritate the pulp tissue, and thus cause intense pain. For this reason arsenic preparations usually contain some local anæsthetic or narcotic, *e.g.*, morphine, carbolic acid, creosote, oil of cloves, cocaine hydrochlorate, thymal, chloretone, are some of the drugs used to limit the severity of the action of the arsenic.

Pressure anæsthesia, wherein cocaine hydrochlorate anæsthetic is forced into the pulp, sometimes can be performed quite easily and painlessly, but pulps vary much in their tolerance of pressure. Some will readily bear the extra pressure required to produce a flow from the cavity into the pulp; in others the same pressure will cause intense pain. In such cases the method must be abandoned.

For all cases which do not lend themselves for treatment either by arsenic or cocaine, local anæsthesia is almost the ideal method. A submucous injection as near the apex of the tooth as possible will, as a rule, satisfy every condition.

After pain is sometimes very troublesome following extractions or operations, either under gas or local anæthesia.

A thorough examination of the socket should be made in case of incomplete extraction, and if a piece of root has been left in, and its removal is deemed necessary, then another attempt should be made. If this is unsuccessful the socket should be swabbed out with an anodyne drug and if an exposed pulp is there it should be touched with concentrated warm carbolic acid. In cases of pain due to necrosis of the socket, deoderant antiseptic syringing may be used, whilst in extensive laceration of the soft and hard parts, an anodyne mouth wash may be prescribed as follows :—

R/

Zinci sulphatis, gr. viii.
Zinci chloridi, gr. vi.
Morphine acetatis, gr. ii.
Aquam ad, oz. viii.

Fiat Lotis. Use with equal quantity of water as a mouth wash as hot as possible.

In obscure cases some local anodyne, such as a powdered tablet of novocain, should be sprinkled into the socket, and hot dry flannels applied to the head will frequently relieve the more severe cases. Pain arising from that condition known as dry socket—resulting from constriction of arteries and blood vessels, due to the use of adrenalin—may be stopped by wiping the socket out with a

little pure phenol, then carefully scraping the surface of the tissues forming the socket with an instrument. This encourages the vessels to bleed, and generally relieves the pain.

Operations such as extractions gingivectomies, bone removals and scraping, etc., obviously would be painful but for the introduction of local and general anæsthesia. The use of local and general anæsthesia is fast becoming a routine method of treatment for alleviating the pain in a vast number of dental operations, and on inquiry I find that in private practice 50 per cent. if not more of the preparations of cavities for fillings is performed under the influence of a local anæsthetic, whilst nasal gas is frequently used for exceptional cavity preparation and pulp removals.

I do not propose to enter into the technique of local injection of anæsthetic solutions, or of the technique of administration of a general anæsthetic, but I refer to them inasmuch as *they are*, a means of treating pain in dental practice.

In conclusion, I thank you, gentlemen, for the kind hearing you have given my paper which, I sincerely trust, will prove helpful to you all.

The Diagnosis and Treatment of Acute Anterior Poliomyelitis.

Clinical Lecture by Dr. C. P. SYMONDS.

GENTLEMEN,—This is one of the diseases which has a satisfactory title. The essential lesion is of the anterior horns in the grey (πολιοι) matter of the spinal cord, and is of an acute inflammatory nature. Any level of the cord may be affected, but the most usual site is the lumbar enlargement. Hence, it is the lower limbs that usually suffer. The cause is a virus of the filter-passing group. It probably gains entrance into the body through the nasal and upper respiratory passages, and is by this route spread from one person to another. Most persons, however, seem to be immune. It is rare to meet with more than a single case in one household. Children are more susceptible than adults, but even in schools, where the condition of age and crowding are optimal for its spread, only a very small percentage of the inmates is affected. This widespread immunity may be natural, or it may, as some think, be acquired. We know that an individual who has had the illness is immune. We know also that its symptoms may be very slight. There may be a febrile catarrh without involvement of the nervous system at all. The proof is that in certain cases, presenting these symptoms and no more, the virus has been recovered from the nasopharynx.

It is therefore quite possible that most people have at one time or another had the disease in its mild form, and owe their immunity to this.

In a typical case there are two stages in the evolution of the illness. The stage of invasion is marked by fever, headache, malaise, anorexia and general pains. With this are often associated complaint of sore throat, nasal catarrh and sometimes diarrhœa. Vomiting is a common initial symptom, but not as a rule persistent. In this stage then the disease presents a clinical picture with which we are quite familiar as a pyrexia of unknown origin which we would expect to subside in a few days without leaving the patient much the worse for it or ourselves the wiser as to its cause. The diagnosis usually made is influenza. This stage of P.U.O. may last for a day or two, or even a week, before the next stage—that of nervous involvement—declares itself. The onset of this is quite commonly sudden. The patient who is in bed with the 'flu gets up to go to the lavatory and finds one of his legs useless. But there are often preliminary symptoms. One of these is complaint of pains in the limbs and especially of tenderness when they are handled, in excess of those met with in a simple P.U.O. This may be a striking clinical feature, and may even lead to the suspicion of rheumatic fever.

Pains in the back also may be uncommonly severe and associated with protective rigidity, so that the child cannot, or will not, sit up. This so-called " spine sign " is considered by the Americans —who have a very much larger experience of the disease than ourselves—to be of particular diagnostic value.

These pains in limbs or back are probably due to inflammation of the spinal meninges.

Sometimes the clinical signs of meningitis are more evident. Pain and stiffness in the back of the neck and a positive Kernig's sign may be present, and this before or without the appearance of paralysis. It is in this type of case that an erroneous diagnosis is most likely to be made. Symptoms and signs of meningitis developing in a child after a preliminary period of fever naturally call to mind a variety of illnesses—infection of the meninges from the middle ear, tuberculous, meningococcal or pneumococcal meningitis–but not so readily the meningeal form of poliomyelitis.

Such symptoms and signs will, however, lead naturally to a lumbar puncture, and by a proper examination of the cerbero-spinal fluid it is as a rule easy to distinguish these conditions from one another. In the case of an otitic, meningococcal or pneumococcal infection the fluid is usually hazy or turbid, and contains large numbers of polymorphs. The fluids from tuberculous meningitis and poliomyelitis are both as a rule clear, and present many other points of resemblance. The cells are increased up to 10, or as much as a 100, times the normal 5 per c.mm., and the increase is mainly of lymphocytes, with a fair percentage—5 to 20 per cent.—of polymorphs. The protein shows a corresponding increase. So far, the fluids are the same, and it is not until we come to the estimation of the chloride and sugar contents that we can distinguish them. In tuberculous meningitis, even in the early stages, the chlorides as a rule are markedly diminished. In poliomyelitis they remain normal. The sugar also is usually diminished in tuberculous meningitis, but is normal in poliomyelitis.

There is another illness in which symptoms of meningitis may exist with a clear cerebro-spinal fluid—encephalitis lethargica. As a rule, other clinical features serve to distinguish this from the diseases we have mentioned, but the difficulty may arise—and it is worth remembering—that in the fluid of encephalitis lethargica there are no polymorphs. The cells are all mononuclear.

The following case provides a good example of this clinical type :—

A girl, aged 8, complained one Saturday evening of a little sore throat and was left in bed. On the Monday she had a temperature of 101°, complained of headache and pains in the limbs and of nausea. Next day the pains in the limbs were more severe, temperature 102°, and some stiffness of the neck was observed. The next day, Wednesday, the neck stiffness was more marked and lumbar puncture was done. The report on the fluid was :

Appearance clear
Cells 145 per c.mm. } 80 per cent. lymphocytes, the remainder polymorphs
Protein increased
Chlorides normal
Sugar present

When I saw her on the following day the temperature was 99°, there was a marked neck stiffness and rigidity of the back, which made it impossible for her to sit up. Kernig's sign was positive. There was slight weakness of dorsiflexion of the right foot, otherwise no sign of paralysis. All the tendon jerks were present and equal. The plantar responses were flexor. Subsequently, the temperature remained up in the evenings for two or three days, the meningeal signs diminished, and the child made a gradual and complete recovery.

In addition to these two clinical types, there is another in which the initial phase of constitutional disturbance is so mild that it passes unnoticed, and the illness appears to begin with the onset of paralysis. This is especially liable to happen in the case of young children, and in a considerable number of the cases brought up to us at the hospital the history is that on a particular day the mother noticed the child limping. In such cases the paralysis is always almost of a mild degree.

DISEASE	POLIOMYELITIS	TUBERCULOUS MENINGITIS	ENCEPHALITIS LETHARGICA
Appearance	Clear	Clear	Clear
Cells	Increased, mainly lymphocytes, 5 to 20 per cent. polymorphs	Increased, mainly lymphocytes, 5 to 20 per cent. polymorphs	Usually increased, all mononuclears
Protein	Increased	Increased	Normal or slightly increased
Chlorides	Normal	Diminished	Normal
Sugar	Normal	Usually diminished	Normal

These cases of poliomyelitis with predominance of meningeal symptoms are not common. I am devoting particular attention to them only because it is the one type of case in which diagnosis may be very difficult. I have known of more than one instance in which the diagnosis of tuberculous meningitis has been confidently made and a fatal prognosis given, the patient having subsequently made a rapid and complete recovery.

In the paralytic cases, whether there is preliminary fever or not, once the paralysis has developed the diagnosis should not be difficult. The

physical signs are those of a lower neuron lesion—flaccid palsy with loss of the corresponding tendon jerks, and, later, wasting of the weak or paralysed muscles.

Though there may be pain and tenderness at the onset there is no complaint of tingling or numbness, nor any loss of sensation. The lesion therefore cannot be in the peripheral nerve, in which sensory and motor fibres course together. We must then carry our imagination higher. The anterior nerve roots may be affected by disease between the point at which they emerge from the spinal cord and that at which they join the posterior nerve roots, and this will give rise to a pure lower motor neuron lesion. But, apart from trauma, there is no disease which will cause this suddenly. We have to think next of the anterior horn cells. These may be destroyed *gradually* in the course of various diseases, such as progressive muscular atrophy, but the *sudden* onset of a pure lower motor remove lesion should always make us think first of poliomyelitis. Any, or all, of the motor cells may be affected. The common cause of death in the early stages is paralysis of the diaphragm. As a rule the development of the paralysis is rapid. At the end of two or three days after the commencement of the paralytic phase the stage of active inflammation is at an end. We are then left with a certain number of nerve cells which have been put out of action. Some of these have been permanently destroyed. Others are damaged only for the time being and will gradually recover their function. It is very difficult at this stage to give any accurate forecast of the degree of recovery that may be expected. As a general rule, I think one may say there is not likely to be *more* than a 75 per cent. recovery. If the initial paralysis has been slight this will mean no more than a trivial disability, but from the statistical records it appears that 60 per cent. of the patients who recover with their lives are left permanently crippled to some extent.

In the treatment of the disease in its early stages the intravenous and intrathecal administration of immune serum has been advocated. In experimentally infected monkeys it has been found that the administration in this way of serum from an animal which has recently recovered from the disease, if given in the pre-paralytic phase, will prevent the onset of paralysis. This has led to the treatment of human beings in the same way, and some good results have been claimed. There are, however, a good many difficulties. One is that of diagnosis in this early stage. In the presence of an epidemic one is naturally on the lookout for the premonitory symptoms which I have mentioned. Even in this pre-paralytic stage the cerebro-spinal fluid shows the characteristic abnormalities, so that suspicion may be confirmed or denied by means of a lumbar puncture. If an early diagnosis can be made in this way serum should be used, but, again, it is only in the presence of an epidemic that the serum of convalescents is likely to be available.

In connection with the problem of early diagnosis it is always worth remembering that poliomyelitis, whether in its sporadic or epidemic form, has a seasonal incidence. The great majority of cases occur year after year in the late summer and autumn months, and one should be specially on the look out for it at these times.

Another measure which may be of value in the early stages is the administration of urotropin. It has been claimed that the experimentally produced disease in the monkey may be cut short by giving large doses of this drug. The objection to its use is that in large doses it causes irritation of the urinary tract owing to the liberation of formaldehyde in an acid medium. Dr. Hurst has argued that as the cerebro-spinal fluid, which permeates the central nervous system, is alkaline, whatever virtue there may be in urotropin, this disease cannot depend upon the liberation of formaldehyde by acid. He has therefore suggested that large doses of urotropin be given, together with sufficient alkali to keep the urine alkaline. In the case of an adult two mixtures are prescribed: one, mixture A, containing 60 grains each of sodium bicarbonate and potassium citrate in the ounce; the other, mixture B, containing 100 grains of urotropin to the ounce. Of mixture A one ounce is given t.d.s. The dose of mixture B is started at one drachm and increased by one drachm at each dose until the full ounce is being taken t.d.s. The urine should be tested daily to be sure that it is alkaline to litmus. This method of treatment has not yet been sufficiently used for us to be sure of its value, but it is worth a trial.

The other measure of treatment which is important in the early stages is rest. Our object is to allow the inflamed parts a period of three weeks from the time the acute stage is over, during which they will be as little disturbed as possible. This means keeping the patient flat in bed and demands careful nursing. Restlessness should be controlled by bromides or if, as sometimes, the pains in the limbs persist and are severe, small doses of opium may be necessary. During this stage massage is inadmissible. The gentlest passive movements at the joints to prevent stiffness are the most that should be allowed, but if the limbs are tender even these should be avoided. Splinting as a rule is not necessary, for in the affected limbs the antagonists of the paralysed muscles are themselves so

weak that contracture is unlikely to occur. A cradle to save the feet from the weight of bed clothes is useful. The water bed should generally be avoided. There is none of that tendency to bed sores which exists when the sensory nerves are affected, and if the muscles of the trunk are involved there is some danger of deformity from sagging of the spine, which is increased by the yielding surface.

When the temperature has remained normal for at least three weeks more active treatment should commence.

By this time the muscles which have lost their motor nerve supply will have wasted. Nothing can prevent this wasting, but if such a muscle is examined microscopically it will be seen that among the atrophied fibres there are normal remnants, probably corresponding with nerve cells which have lost their function for the time, but have not been destroyed. Our objects are to maintain this remnant of muscular tissue in as fit a state as possible by improving its blood supply and giving it regular exercise, and to encourage the patient to be constantly testing the function of the damaged motor cells in attempts at voluntary movement. Of these measures active exercise is the most important. Massage and electricity are second rate substitutes for what is best obtained by voluntary movement. Nevertheless, there are usually some muscles so completely paralysed that galvanic stimulation offers the only possible means of regular exercise, and massage the best method of improving the circulation. It is important throughout this stage to guard against deformity. If at any joint one group of muscles is weakened, and the antagonists spared, the tendency is for these to become permanently shortened, the resulting condition being known as contracture. This can only be prevented by splinting. The splints, however, should not be so continuously applied as to deprive the weakened muscles of their proper chance of exercise. There has been a tendency in some quarters to insist on *continuous* immobilisation of the paralysed muscle in the relaxed position. This is probably unnecessary, and may even be harmful, if it prevents exercise. The patient should be encouraged not only to contract the weakened muscles, but to make use of the affected limbs, as soon as possible. To this end exercise in a swimming bath, and especially in a brine bath, may be of value, the dead weight of the limbs in this medium being evenly supported without restriction of movement.

It is important that the patient should be made to get about on his own legs as soon as possible for the sake of his morale and general physical health, as well as the chance of exercise it affords. Various mechanical contrivances may be of value in attaining this object, and the assistance of the orthopædic surgeon is frequently called for in devising ambulatory splints. These should be discarded whenever the patient is able to do without them.

If these measures of treatment are employed systematically, steady improvement may be expected. During the first month or two it is rapid, thereafter slower. If at the end of four months any muscle remains completely paralysed it is unlikely ever to recover any useful function. In muscles which have partially recovered there is not likely to be much return of voluntary power, but strength and bulk may still be developed to a useful and sometimes surprising degree by means of voluntary exercises. This therefore is the stage at which massage and electricity cease to be of any practical value, and remedial exercises offer the sole means of improvement. The extent to which this can be carried will depend upon the patience and determination of the invalid and the instructor. For an adult who has before the illness been able to swim this form of exercise offers a further opportunity.

If treatment upon these lines has been efficiently carried out we shall find ourselves within a year of the onset confronted with a residual paralysis which, whether trivial or serious, is permanent. Such further measures of improving mechanical efficiency as are possible belong to the province of the orthopædic surgeon.

Guy's Hospital Gazette

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.

Some Hints on Urine Testing.

NEXT to washing surgical instruments and scrubbing "take-in" patients, perhaps the most fascinating of the manifold duties of a Surgical Ward Clerk is the process of examining urines.

A grave shortage of companion ward clerks when I entered the Hospital, and later a hefty queue of diabetics and nephritics which filled my allotted beds when a medical clerk, have yielded a unique experience, and it is with a keen sense of fraternal spirit that I here have endeavoured to offer a few valuable hints to those whose path lies the way I have come.

As a primary rule, never examine the urine of a new patient. Combat your eagerness with consideration for the ward, whose supply of specimen jars is limited, and for the patient who, on admission, is not at his best. A blue ticket above a patient's bed means that the jar of urine on the shelf must be left there for at least a week before being tested, so as to precipitate any normal or abnormal constituents that might be present. Other urines should be tested at one of two times: (1) Just when the patient is being conveyed up to the operating theatre, so that if sugar is found up to or beyond a war time ration you can rush up and order the anæsthetist to desist until you have pumped in insulin; or (2) When the patient has gone and the registrar wants the report completed—*i.e.*, written up. If no urine is left use your initiative.

Now to the actual testing. The first thing is to find the key of the ward test cupboard. This game can be played in the style of "Hunt the Slipper" with the ward convalescents, and it can provide a most amusing half hour's recreation. Incidentally, the present tendency of the Sister to have a fixed place for the key to hang is rigorously to be deprecated.

To test for albumen pour some urine into a test tube and then go to look for some matches. The tobacconist next to Lyons in the Borough High Street has a fine line in book matches, which I can definitely recommend. Coming back, the spirit lamp generally can be found behind one of the biggest bottles on the shelves, and, failing a drop of the best from out one's hip pocket, ozonic alcohol provides a convenient substitute for the methylated spirits which is *non est*. Now, hold the test tube in the flame until your fingers become unconveniently hot, when, if albumen is present, it will precipitate, this fact being recognised by the tinkling sound made as it drops to the bottom of the tube. Albumen in the urine means that the patient had egg for breakfast.

To test for sugar, one authority whose name mercifully I forget, advocates the use of the gustatory apparatus, but, personally, I use Mr. Fehling's method. The technique of this you will find in an ordinary text book.

For the blood test just add a spot of guaiac to the urine, heat like fury, add any ozonic alcohol that might be left over, and heat again, when the tube should burst. Let things cool down a little and if blood is not present you are extremely lucky.

Having finished the chemical tests and exhausted most of the urine, one generally proceeds to take the Specific Gravity. This is done by adding water till the hydrometer floats, reading the figures as best you can, and then using your imagination as to how much you are justified in adding for the water poured in. Always return the hydrometer to the jar intended specially for its keep. People do not realise the enjoyment lost by not doing do. One can drop the instrument into the jar from increasing heights and derive no end of enjoyment from watching it sink slowly to the bottom and then quickly bob up again. There is a particularly long jar in one of the wards, and I would be interested to know whether anyone has broken my record of a 4 feet 2 inches drop. I broke my own record once—other breakages amounting to twelve shillings.

One is not justified in saying that one has examined a urine without having looked at it under a microscope. An essential is a good microscope, and there is a remarkable instrument in the Clinical Laboratory. The latter, as we all know, is admirably fitted up with all the adjuncts of an ideal lab., not least among its possessions being a centrifugaliser, which is either being repaired or going to be repaired. Centrifugalising by hand is the second best way, though the after symptoms are suggestive of a cerebellar or vestibular lesion. Just the other day, with the aid of the clinical microscope, I discovered 11 hairs, 2 (?) hairs, 4 sugar crystals, 1 calculus and 2 flies in the urine of a patient suffering from Addison's anæmia, which demonstrates how, even in this direction, this line of observation is apt to be neglected.

Finally, having thrown away the rest of the urine, get some litmus paper, swear a mighty oath, and then, realising that even if you have thrown away all the precious liquid, you still have some initiative left, console yourself by writing down the same reaction as that of yesterday.

BILLY VERDIN.

Reviews.

Studies in Intracranial Physiology and Surgery. By Harvey Cushing, M.D. Published by Mr. Humphrey Milford, Oxford University Press, Amen House, Warwick Square, E.C.4. Pp. 146. *Price* 8*s.* 6*d.* paper; 10*s.* 6*d.* cloth.

IN this book are published three lectures delivered by Dr. Cushing at Edinburgh in 1925, constituting the Cameron Prize Lectures. The subjects chosen are: 1, The Third Circulation and Its Channels; 2, The Pituitary Gland as Now Known; 3, Intracranial Tumours and the Surgeon.

In an introduction Dr. Cushing describes the foundation of the Lectureship and its aims. It was the desire of the founder that the Lectureship should be held by those who have contributed to the knowledge of practical therapeutics. Incidentally, Dr. Cushing points out that the art of treatment tends to be relegated to the background; diagnosis, with its attendant investigations, being given foremost consideration in the modern day clinic.

The first Lecture deals with the cerebro spinal fluid and the spaces through which it circulates. The anatomy and physiology of this system are fully explored, much experimental work is described and theories arising therefrom are discussed. A most useful table of references is appended. The work summarises a great deal of laborious investigation, undertaken by Dr. Cushing and by his assistants at his instigation, as well as by others interested in the subject, of which so little has been known until quite recently.

The second Lecture, on the Pituitary Gland, traces from the earliest days the growth of knowledge in this direction. The many problems in relation to the anatomy and physiology of the various parts of the gland and their relation to disease are fully discussed.

The surgical treatment of the three main groups of tumours—the supra sellar meningiomas, the cranio-pharyngeal pouch tumours and the hypophysial adenomas—is summarised. The third Lecture is on the subject of brain tumours and especially the gliomas. Mention is made of the progress in operative technique in recent years.

Methods of diagnosis, matters pathological and tumour classification are dealt with. Dr. Cushing gives a most interesting account of the gliomas, their differentiation pathologically and clinically.

The whole publication provides an absorbing and instructive work, giving a wealth of information and containing a number of references to add interest to those in search of further guidance on any particular points raised.

Health Visitor's Guide. By Lucy E. Ashby and Kate Atherton L. Earp. Published by the Scientific Press, Faber & Gwyer, Ltd. 1st Edition. *Price* 3*s.*

THIS little book is full of sound commonsense together with useful knowledge and advice. It should prove of especial value to District Nurses and Voluntary Health Workers. The trained Health Visitor would perhaps find it rather elementary. The writers evidently possess an intimate knowledge of the life of the working mother, and useful headings for talks to mothers could be taken from this book.

There is a valuable list of organisations connected with welfare work at the end. The chapter on physiology opens up a wide field for thought.

One is inclined to think that a cod liver oil emulsion is a safer and cheaper fat for the baby in a cottage home than is the thick cream recommended.

The chapter on the feeding of the toddler is excellent, as is that which deals with ante-natal hygiene.

Medical Notes. By W. J. Tyson, M.D., F.R.C.P. Published by Messrs. H. K. Lewis. & Co. Pp. 64. *Price* 2*s.* 6*d.*

THIS little book is a compendium of brief notes, averaging in length a little over a page each, which the author has gathered together in the course of many years of practice. These notes are entirely uncorrelated, and deal with a variety of topics, ranging from "thrombosis of the superior mesenteric vein" to "the danger of putting old people to bed."

The book, while containing no reference whatever to those aspects of medicine which are concerned with laboratory investigations and tests, is replete with those plums of experience which the general practitioner alone can pick from the tree of knowledge.

Thus, when the right auricle is enlarged—a condition revealed by an increase of the normal dulness of one finger's breadth to the right of the sternum in the fourth interspace to two fingers' breadth—the author has found that the application of three to six leeches to the præcordium has produced conspicuous relief. Theoretically, it is difficult to see why the removal of two or three ounces of blood from the cutaneous capillaries of the chest wall should relieve congestion of the right auricle and it would be still more difficult to prove that the value of such a remedy had no other effect than the one which so many of such time-honoured remedies exercise upon the imagination.

The author also describes a form of dyspepsia which, for want of a better term—a surprising want in view of the profusion of terms now found in the gastrological literature—he calls "bilious dyspepsia." This disorder is characterised by lassitude, loss of appetite, abdominal fulness, shoulder pains, impairment of the kidney processes, headaches, cutaneous irritability and sleeplessness. In these cases the author has found that a blue pill produces a happy soporific action. He also holds the sea air partly accountable for the condition. This is distressing, as many of us have in the past held the murky air of cities responsible for such symptoms, for which we have prescribed holidays by the sea.

This is a readable, friendly little book, but we can hardly recommend the expenditure of 2*s*. 6*d*. upon it.

Recent Advances in Medicine. By. G. E. Beaumont, F.R.C.P., and E. C. Dodds, M.D. 3rd Edition. Pp. 408. Published by J. & A. Churchill. *Price* 12*s*. 6*d*.

THIS work has passed into three editions in three successive years. This edition differs from the second in containing an introductory chapter in which the recent advances in clinical and laboratory methods, described at length in the later chapters, are convincingly summarised. There have also been added sections dealing with pulmonary lipoidal injections and cholecystography, the recent work on the Van den Bergh test, the galactose and the phenoltetrachlorophthalein tests for liver efficiency. Lastly, the chapters dealing with blood analysis and blood transfusion have been amplified and re-arranged.

It is significant of the direction in which medicine is "advancing" that by far the greater part of this book is devoted to laboratory tests and special investigations. The majority of these are quite outside the range of the general practitioner, to whom much of the work will consequently be of dubious interest. A work dealing with the advances that in recent years have facilitated the diagnosis, treatment and prognosis of the commoner diseases *without* the aid of complicated apparatus and technique involving a special laboratory training, would fill a want which is only in small part satisfied by this work.

The book contains 18 chapters. Of these, 5 are concerned with investigations of the functions of the kidneys, liver, stomach, pancreas and heart. Under the last heading are described at considerable lengths pulse tracings, electrocardiographic pictures, the determination of blood pressures, and the administration of drugs in heart disease. No mention is made of the pulse ratio, a method of estimating the cardiac efficacy which, to the general practitioner, will be of greater value than the polygraph or the electrocardiograph. In other chapters are described the examination of blood and cerebro-spinal fluid—no advances appear to have been made in neurology beyond the cerebrospinal fluid—and various methods for estimating the functions of the ductless glands. The authors in several places describe in considerable detail certain tests. They then produce evidence indicating that these tests are of little or no value. Such a test is that of the "white line of Renal Insufficiency," described on page 212.

There are also chapters on the diagnosis of enteric infections, the diagnosis and treatment of diphtheria and scarlet fever, cutaneous tests and desensitisation, diabetes and basal metabolism.

The style is for the most part clear, and the description of the tests are intelligible. The chapter on the heart—especially the section dealing with drug treatment—has been less carefully written than the others. On page 251 Eggleton's formula for the calculation of the optimum dose of tincture of digitalis is almost incredibly badly described, likewise, on page 256, the account of the action of quinidine. The book will be of chief value to the clinical biochemist and to candidates for higher medical examination.

The first chapter, summarising the nature of the gain to the patient forthcoming from special investigation, the chapters on desensitisation, diphtheria and scarlet fever might be of interest to the general practitioner. In our opinion, the helpfulness of the book would be enhanced if attention were directed to those tests which the enterprising general practitioner could himself carry out.

The Enlarged Prostate. By Kenneth M. Walker, F.R.C.S., M.A., M.B., B.C., Lecturer in Venereal Diseases, St. Bartholomew's Hospital; Surgeon, with Charge of Genito-Urinary Department, Royal Northern Hospital; and Surgeon to St. Paul's Hospital, London. Published by Humphrey Milford, at the Oxford University Press. 190 pages. *Price* 12*s*. 6*d*.

MR. WALKER'S aim in this book has been to review the present position of prostatic surgery and to furnish those who are not expert in genito-urinary methods with a means of bringing up-to-date their knowledge of this subject. For those who wish to go more deeply into the various points raised, a bibliography has been appended to each chapter.

The anatomy and physiology of the gland are discussed, and the various theories of the pathology of enlargement are clearly set forth. Mr. Walker proceeds thence to the diagnosis and treatment of the condition, and discusses in detail the various operations now performed. We were particularly interested in the per-urethral operations described, which would appear to be of great value in some cases of obstruction by virtue of their simplicity compared with removal of the whole gland. He concludes with a chapter on mortality and prognosis, in which some interesting statistics are discussed.

This is a very readable and well balanced book, and can be recommended with confidence to the practitioner who wishes to know the views on this subject generally held at the present day.

Recent Advances in Biochemistry. By JOHN PRYDE, M.Sc. Published by Messrs. J. & A. Churchill, London. Pp. 348. *Price* 12*s.* 6*d. net.*

THIS is a companion volume to *Recent Advances in Physiology* by Prof. Lovatt Evans, and care has been taken to prevent overlapping. The volume on *Physiology* has distinct biochemical and biophysical leanings, so that the present volume does not deal with subjects such as tissue oxidations, internal secretions and the balance of acids and bases. As the size of the book is strictly limited, this is perhaps just as well. Moreover, it enables the author to include an account of recent work on immunological reactions, which is of great interest. Naturally, certain sections of the book bristle with constitutional formulæ, and are therefore the less attractive to the general reader. Other sections, however, are eminently readable, such as those on phosphorus compounds, the role of sulphur, the vitamins and that on immunology. Practical details are out of place in a book of this kind, but where the subject is considered of special importance, such as the preparation of tesose phosphates and of glupathione, a succinct practical account is given, which materially helps the reader in getting a mental grasp of the subject. The book is not only accurate and up to date, but also illuminating and readable. With so active a subject as biochemistry it will not be long before a fresh edition will be desirable, and it is to be hoped that the author will have an early opportunity of extending his labours in this direction.

The sections dealt with are:—Protein catabolism, amino acids and the constitution of urea; The proteins as colloids; Nucleo proteins; The carbohydrates; Biochemistry of fats; Phosphorus compounds; The function of compounds of sulphur; Vitamins; Hæmoglobin and related pigments; Immunological reactions; Chemotherapy. An adequate list of references is given at the end of each chapter.

Nursing News.

THE following Nurses were successful in the State Examinations, which were held in February.

Final

M. Alchin, L. F. Ansell, M. E. Bendall, H. Bowker, P. Carden, M. D. Cook, E. E. Edwards, M. Fenton, D. Haigh, E. Hibbs, G. A. F. Johnson, V. M. H. Lander, A. Randall, G. M. Reed, L. M. Rose, E. K. Wackett.

Preliminary

E. Crawford, G. Howlland, N. Lambert, H. Lewis, H. Major Lucas, P. Mather, G. Mitton, D. M. Reed, L. G. Rogers, G. Smyth, K. O. Tyson.

Miss E. M. S. Johnstone has been appointed Matron of the Bristol Royal Infirmary to succeed Miss MacManus. Miss Johnstone was trained at Guy's and, after several years' war service, returned in 1918 to the Hospital as Night Sister. Later, she was Sister-in-Charge of Evelyn and Addison Wards, and left in 1922 to take up the appointment of Matron of the Royal City of Dublin Hospital.

Miss R. Stokes has been appointed Matron of the Royal City of Dublin Hospital to succeed Miss Johnstone. Until recently she held several Sisters' appointments at Guy's, including that of Office Sister, which she resigned last year.

Miss M. Drabble, who held the appointment as Sister-in-Charge of Matron's House, left the Hospital at the end of February.

Correspondence.

Guy's '89 Club.

DEAR SIR,—The above Club will hold their 31st Annual Dinner, postponed from last year on account of the coal strike, at the Hotel Cecil on Wednesday, May 13th, at 7 for 7.30 p.m.

Dr. G. L. Eastes will preside.

Will all members keep this date open? Notices will be sent off in April.

Yours truly,

GERALD S. HOVENDEN, *Hon. Sec.*

Barnes, S.W.13.

March 23rd, 1927.

Sport.

Rugby.

Kent County Senior Cup.

Final.

Guy's "A" v. Sidcup.

THOSE supporters who made the journey to Blackheath on Saturday, April 2nd, were rewarded with a vengeance. The A team, following the good example of the Extra A, won through and by the same margin of points, though arrived at by different totals. Hence, another precedent was set up, it being the first time we have ever won both Cups the same year. Heartily do we congratulate the captain, J. C. T. Tregarthen, and his team. Triers all and every man on his toes. Sidcup are no poor team. They were fifteen trained men and made us go every inch. It was a pity the rain came on just as we took the field. It made little difference though, as both teams kept the game open and play was very fast.

Early on Morgan, who played splendidly, dribbled, and Clogg, following hard, looked to have scored, but a penalty some distance out was given against us. Next, Radford led a rush. Coats, the Sidcup back, though, was safe. Thomas dropped at goal and hit the post. Harris in the centre was working hard and going straight. Van Schalkwijk gained ground constantly with his kicking. Sidcup defended strongly ; in attack they fed Hutchinson, who should not wait for the ball to bounce. Both centres, the brothers Vinson, were good men, yet their attack suited Hutchinson, who never made a slip. Now, the Sidcup forwards went for our line, Harris eventually clearing to half way. We had again an anxious time just prior to the interval. One would have liked the pack to have tackled lower and helped the three quarters more in this respect.

Ends were changed, and at once Morgan came through with the ball at his feet. Coats did not field cleanly and Morgan gained first blood for us, Radford converting magnificently. We had the best of the game now. Brown helped Morgan, and all the forwards showed up at various moments, and the shoving was good, though the heeling slow. Barnes worked tremendously hard. Thomas was very closely watched, and so were all the three quarters ; they were never allowed room to move. Ive got past Coats once by footwork, but missed the touch down. Good passing by Sidcup looked very ominous, but Cook failed to accept and our forwards rushed back. Van Schalkwijk got through, but was poorly supported. Sidcup were tackling well. Then Thomas swung out to Van Schalkwijk, who dropped a neat goal. Sidcup replied valiantly and some really clever handling ended with G. C. Vinson gaining a well-earned try, which went unconverted. The game soon ended, and we were left victors after a fine game by 1 goal, 1 dropped goal (9 points) to 1 try (3 points).

Guy's Team—J. C. Hutchinson ; O. Ive, J. Harris, J. G. Van Schalkwijk, T. G. Robinson ; T. J. Barnes, I. K. Thomas ; J. C. T. Tregarthen, C. D. Malone, L. Brown, J. H. Richmond, D. S. Clogg, E. W. J. Radford, T. Morgan, R. A. D. Hogbin.

Kent County Junior Cup.

Final.

Guy's "Extra A" v. Old Dunstonians "A"

THESE teams met at Blackheath on Saturday prior to the Senior Final Tie. Play was late in commencing, but the teams soon set about their work in real earnest. Balding was a little shaky at the start, but he was well supported and the defence held under pressure from the Dunstonian forwards. For about twenty minutes it looked as though our line must be pierced ; Wilson made a very determined effort to cross and Wood was always a source of danger. Several opportunities our opponents lost. Instead of going hard they kicked, and we were able to at last breathe freely when the forwards, aided by Eustace, dribbled to midfield. J. H. Jones was especially good. Williams backed him up and Clarke and Ettles were very prominent in the heavy work ; Smith was also noticeable. The backs handled well as Eustace and Clegg got them into action, and just before the interval the ball came right along the line to Camps, who scored wide out. The excellent kick by Freeman only just went outside the upright.

The second half of the game saw us relieved from the strenuous pressure of the early portion. The forwards lasted the better ; Pitt-Payne led his team enthusiastically. Chief danger to us came from Wilson and Wood on the right. The Guy's men tackled thoroughly and countered the Dunstonian pack by fast foot work, always led by Jones. Clegg was now showing up well and Coltart and Littledale were straight runners. At length the last named in most determined fashion plunged right through the Dunstonian side, and the resulting try proved to be the end of the scoring.

Ettles was held inches out. Clearly now Guy's were on top, their three quarters constantly in action, Dunstonian's only attacking spasmodically. Guy's held their lead and eventually gained a victory by 2 tries (6 points) to 0.

It was a really good win. We had decidedly the worst of the early portion of the game and it looked as though we should be beaten. Pitt-Payne led a spirited side ; they responded gamely, and Guy's are proud of these Extra A men. Theirs was the duty of showing the way and they, having by their plucky recovery won their Cup, paved the way for the senior men to follow their example.

Guy's Team—L. E. Balding ; L. M. Garrett, E. J. Littledale, N. B. Coltart, F. E. Camps ; A. P. Eustace, W. B. Clegg ; L. T. Pitt-Payne, D. C. M. Ettles, R. N. C. Smith, M. A. Freeman, J. W. H. Jones, N. S. Plummer, D. S. Williams, R. L. Cautley.

After the matches were both over Mr. Rowland Hill, late President of the Rugby Union, presented the Cups to their respective teams. J. C. T. Tregarthen, captain of the A, and L. T. Pitt-Payne, captain of the Extra A, receiving them on behalf of their XV's. This is the first time we have ever gained the Junior Cup.

Hospital Information, etc.

Pass List.

University of London.

2nd Examination for Medical Degrees.

March, 1927

G. Barwell	E. T. Blacklee
W. H. Bradbeer	A. R. Clarke
H. A. Constable	N. L. B. V. Eckhoff
J. P. Fitzgerald	A. I. Gorer
K. Harris	D. W. James
G. F. Lashmore	R. A. Q. Lay
S. Lefcovitch	G. A. M. Lintott
H. G. McComas	M. L. Mistri
G. W. Rake	R. N. C. Smith
K. S. Southam	T. F. Todd

3rd Examination in Dental Surgery,

PART II

March, 1927

F. S. Krusin

Society of Apothecaries of London.

March, 1927

Surgery

S. Slotar

Papers by Guy's Men.

W. H. Ogilvie, M.Ch. Tumour of the Calf, *Proc. Roy. Soc. Med.*, xx, 1927, 543 ; *Clin. Sec.*, 36.

G. B. Dowling, M.D. (1) Leismyoma Cutis, (2) Maculo anæsthetic Lepra, *Ibid.*, 564, 565 , *Sec. Dermat.*, 54, 55.

T. B. Layton, M.S. (1) Tumour of Upper Jaw, originating in Maxillary Sinus and Non-Malignant Stricture of Œsophagus ; (2) Orbital Abscess and Ethmoiditis, *Ibid.*, 594–596 ; *Sec. Laryngol*, 12, 14.

W. M. Mollison, M.Ch. (1) Double Recurrent Paralysis of the Vocal Cords, (2) Case of Laryngitis: for Diagnosis, *Ibid.*, 601, 602 ; *Ibid.*, 19, 20.

E. G. Slesinger, O.B.E., M.S. Embryonic Sarcoma of Kidney, *Ibid.*, 719 ; *Sec. Urology*, 19.

Arthur F. Hurst, M.D., F.R.C.P. Treatment of Achalasia of the Cardia (so-called " Cardio-Spasm "), II, Measures for Relief, *Lancet*, 1927, i, 667.

Publications Received.

Review of Reviews, University College Hospital Magazine, The Isis, Pharmaceutical Journal, The Navy, Journal of Society of Massage and Medical Gymnastics, Chemical Age, London Hospital Gazette, Dental Record, Golf, St. Bartholomew's Hospital Journal, Prescriber, Hospital Gazette, British Medical Journal, Nursing Times, Nursing Mirror, Gownsman, Lancet, Architectural Association Journal, Oral Health, Bedford College Magazine, St. George's Hospital Gazette, New Zealand Medical Journal, St. Mary's Hospital Gazette, The Gong, Journal of Medical Association of South Africa, Indian Medical Record, Magazine of London Royal Free Hospital, King's College Review, The Broadway, Birmingham Medical Review, Canadian Medical Journal, Middlesex Hospital Journal.

Change of Address.

Harold J. Selby, Wilcox House, Newnham-on-Severn, Gloucestershire.

D. S. Davies, M.B., B.Ch., 127, Long Acre, W.C.2.

Birth.

COXON—On March 22nd, 1927, at Dersingham, Norfolk, to Ella, wife of Cedric Coxon, M.B., a son.

PRITCHARD—On March 23rd, 1927, at 87, Clarendon Road, Putney, to Isabel, wife of G. B. Pritchard, a son.

Deaths.

ADAMS—On March 20th, 1927, in London, Eustace Henry Adams, late of 25, Balance Street, Uttoxeter, aged 45 years.

CLOWES—At Colchester, on March 12th, 1927, Francis Clowes, M.R.C.S., L.S.A., aged 91 years.

GREENE—On March 5th, 1927, at Kingsnorth Gardens, Folkstone, John Allen Campbell Greene, M.R.C.S., L.R.C.P., M.C., formerly of Woodsley Road, Leeds.

EDS. { P.F.S.C. G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *April 23rd, 1927.* *Number 1011*

PASSIM

THERE must have been from time to time in the past—and probably will be in the future—"voices crying in the wilderness" truths' that have never been recognised, for it takes more than the actual discovery of a new principle to establish it. It requires a forceful personality as well as a disinterested critical faculty. Too often the forceful personality alone will impose a false idea, and too often a prejudiced critical faculty will trample on the delicate growth of some fresh and potentially fruitful idea.

Most of the important discoveries in medicine and surgery have been regarded at first with almost derisive scepticism, chiefly, no doubt, because the pattern of medical knowledge is an imperfect tissue of probabilities, with few of the possibilities of mathematical proof that are available in a pure science. The recognition, therefore, and ability to define a new medical or surgical principle needs something rather in the nature of intuition, which is perhaps not very different from what the Americans call "an eye to the main chance,' without which learned savants may go on for years in laboratories producing endless learning without wisdom, like the tedious machine in the story that ground out salt for ever and was cast into the ocean for its sins.

The recent Lister centenary celebrations have produced a resumé of all the qualities of personality, intuition and critical ability by which Lord Lister developed the antiseptic, and finally the aseptic, surgical technique from the "main chance" presented by Pasteur.

No small share of the honour of a new discovery is due to those men whose vision enables them to see its possibilities.

It is therefore with great interest that we read two letters from Sir William Hale-White and Dr. E. Clifford Beale—published elsewhere in this number—telling of the first use of Listerian methods at Guy's, and the "undisguised ridicule" with which one of the most important discoveries in surgery was regarded.

It is very difficult to realise that the whole technique of asepsis which now appears as age old as the Laws of the Medes and Persians should have been developed in the days of our fathers.

Is it possible that the thousand intricacies of bacterial activities that confuse the modern physician in his attempts to cure infections will be reduced in our day to some simple and effective principle?

ELSEWHERE we publish the last lecture delivered by Mr. Montagu Hopson as Senior Dental Surgeon. The enormous attendance testifies to the place Mr. Hopson has won in the hearts of Guy's men during the time he has fostered the growth of the Dental School.

Mr. Hopson has left to the Dental School and the Hospital a gift of the spirit of geniality and courtesy that must live as long as Guy's.

We offer to Mr. Hopson our very best wishes for many years' enjoyment of the less strenuous days before him.

ELSEWHERE we publish an appreciation on behalf of the Nurses of Miss Margaret Hogg, who has recently retired after 10 years as Matron to the Hospital, a period of great difficulty, as is pointed out in the appreciation, owing to the great changes in organisation and feminine outlook, following th war.

As a student and a House Officer at the Hospital, one comes very little into contact with the Matron, who is one of the rather vague "powers that be," but our infrequent meetings with Miss Hogg impressed us with the quiet and efficient dignity of

her personality and the high standard of nursing, which we take pride in at Guy's, and the demand for Guy's nurses outside reflects very great credit on those who are responsible for their training.

We offer our best wishes for the future to Miss Hogg.

THE Clubs' Union Council have decided to produce their *Year Book* in September next. Those responsible for its production are anxious that the information in it shall be as detailed as possible and request the assistance of the secretaries of all the Clubs, Associations and Societies of the Clubs' Union in collecting as much material of interest to Guy's men, present and past, as lies in their power.

Mr. J. H. E. Winston, Secretary to the Medical School, is compiling the book, and all matter should be sent to him.

IN this number we publish some very interesting reminiscences of an old Guy's man, and hope that his much appreciated effort will stimulate the production of similar papers.

WE have to congratulate two old Guy's men—Dr. A. Scott-Turner and Mr. S. H. Croucher—on their appointment to sit on the Magisterial Bench at Penge. Both are well-known public men in that district, and well merit the distinction conferred on them.

Dr. Scott-Turner qualified at Guy's before the war, in which he served with distinction, being attached to the Royal Air Force in France. Mr. Croucher is well-known at the Hospital, and especially with relation to the Medical School, and he has often been seen about the Hospital since his retirement in December, 1925. We offer our heartiest congratulations to both these gentlemen on being so honoured.

SEVERAL letters have been received concerning our criticisms of the frivolities at Richmond on the occasion of the Cup Final. We should like to point out that our criticisms, etc., were chiefly directed against those gentlemen whose delight was in endeavouring to obtain all their fun without paying for it. We feel that this is not playing the game, and it was this aspect rather than aimlessness, apart from the collection of money, that we deplore. Perhaps in future years this might be avoided by including the price of admission to the ground at Richmond in the Rag Ticket.

Trigeminal Neuralgia, Secondary to Disease of the Teeth.

Clinical Lecture by M. F. HOPSON, Esq., L.D.S.

MR. HOPSON chose the above as the subject for his last Clinical Lecture, which was of absorbing interest, both from its intrinsic matter and from the fact that it was Mr. Hopson's last lecture as an active member of the Dental Staff of Guy's Hospital.

The attendance was a record one, and included many members of the Medical and Dental Staffs, as well as several of the Clerical Staff, and well indicated the affection and respect in which Mr. Hopson is held by all, and their extreme regret that he was about to pass from the active list of the Hospital.

Ladies and Gentlemen,—

I think this is the first time I have given a Clinical Lecture when I have had to commence with the words "Ladies and Gentlemen."

I have chosen Trigeminal Neuralgia Secondary to Disease of the Teeth as the subject of my Clinical Lecture this morning because it is a distressing condition which you will be called upon quite early in your careers to diagnose and to treat. Further, it is a condition which, apart from oral sepsis, is most likely to bring you into contact with the practitioner of general medicine; hence, you see it is important you should be thoroughly conversant with it.

Now, before considering trigeminal neuralgia limited in origin to some dental lesion, it might be well to look at it from a somewhat broader standpoint. With practically one exception, and that due to the present limitations of our knowledge, we are able to say that neuralgia is not a disease *per se*, but merely a particular symptom of a variety of other conditions, all of which are very remote from the site of the pain.

Neuralgia may be defined then as "a shooting, boring, burning pain, nearly always paroxysmal in character, felt along the course of a particular nerve and its branches, and not referred solely to its periphery."

Now, what are the causes of this type of pain when felt along the branches of the fifth nerve, and how may we classify them? Here is a diagram of the fifth nerve showing its origin, its distribution, and its function, just to refresh your memories as well as mine, for it is many years ago

since, up in the Pickle Room in the old Anatomy Department, I was taken over the fifth nerve the day before I went up for my "*Viva*," and with great luck we had it in the paper.

It resembles a spinal nerve in that it arises from two roots; it has a ganglion on its posterior end in the cranium, and it is a mixed nerve, both sensory and motor.

Origin of Anterior Root (Motor)—

Superficial origin, Pons Varolii.

Deep origin, floor of Fourth Ventricle and partly from cells at side of Aqueduct of Sylvius.

The origin of the posterior and sensory root is superficial in the pons varolii, but its deeper origin is away in the medulla. The two roots of the nerve run forward and the fibres of the posterior root enlarge to form the gasserian ganglion, but the anterior medulla root passes beneath this ganglion without making any connection with, but joins outside, the cranium with one of the trunks derived from it.

Main Branches from Gasserian Ganglion—

1. Ophthalmic—Eye, lachrymal gland, nasal fossæ, and integuments or eyebrow, forehead and nose.

(*a*) Ophthalmic Ganglion (Lenticular)—
Sensory, fifth;
Motor, third;
Sympathetic, cavernus plexus.

The second or superior maxillary division supplies the middle part of the face and the antrum, and all the maxillary teeth.

2. Superior Maxillary—Middle part of face, maxillary teeth, etc. Spheno-palatine ganglion (Meckle's).
Sensory, fifth;
Motor, seventh;
Sympathetic, cervical plexus.

In the third division it is both motor and sensory. It supplies the mandible and the teeth, the lower lip and chin, the anterior and superior part of the ear and the external auditory meatus.

3. Inferior Maxillary, mandible and teeth, lower lip and chin, anterior superior part of ear and external auditory meatus.
Motor, muscles of mastication.

(*a*) Otic Ganglion—
Sensory, fifth;
Motor, fifth;
Sympathetic, meningeal plexus.

(*b*) Sub-Maxillary Ganglion—
Sensory, lingual fifth;
Motor, chorda tympanic and fifth;
Sympathetic, facial artery plexus.

Then, through the ganglia and by junction, the fifth nerve has communication with several other cranial nerves, as well as with the sympathetic. Now, if I have made any mistakes in going over this nerve I am quite sure that Professor Johnston will correct this for me and for you at an early opportunity.

Trigeminal neuralgia may be classified as major and minor. Neuralgia quinti major, sometimes called epileptiform neuralgia, is the most frightful of all neuralgiæ, the pathology of which has still to be elucidated, and yields to no treatment short of surgical interference, often as grave as excision of the gasserian ganglion, although relief may often be afforded by injecting alcohol into the ganglion. The cause is certainly not primarily dental, inasmuch as the removal of all the teeth has failed to afford relief.

Neuralgia quinti minor may arise from the following conditions: For instance, it may be due to morbid conditions of the teeth and their attachments, to the tongue and oral mucous membranes, eye, ear, nose, maxillary and frontal sinuses, and the abdominal and thoracic viscera. Or it may be due to organic lesions of trigeminal nerves or its roots, gummata, tumours, etc. It is associated with hysteria, and other mental states. We know that it is fairly common during pregnancy and it may be secondary to malaria, syphilis, alcohol, lead and other poisonings. Now, that is rather a formidable list of causes, but we are concerned with the elimination of only one—trigeminal neuralgia secondary to dental disease.

The character of the pain is sudden in its onset. It flashes along the course of one of the branches of the fifth nerve, focussing itself at one particular spot, increasing in intensity, lasting for a few minutes or some hours, and usually terminating as suddenly as it commenced.

It may arise without any apparent cause. On the other hand, the incidence of a direct draught, or the sudden change of temperature from the cold winter air to that of a warm room, or the act of stooping down to tie up a boot may induce an attack. All these minor neuralgias are markedly affected by the general states of the body. They are usually at their worst during hunger and fatigue, hence the attacks are generally periodic.

Someone defined dental neuralgia as toothache plus debility. Certainly all the general diseases I have mentioned, together with pregnancy, may act as predisposing causes of dental neuralgia, either by lowering the general vitality and bodily resistance or by being themselves predisposing causes of caries or some other dental lesion.

Accompaniments of the pain may be accompanied by:—

1. Vaso-motor changes—The face may become flushed or sweating may take place, pallor may be present and lachrymation and salivation.

The muscles of the face may be drawn up. Muscular spasm—both clonic and tonic.

2. Trophic changes, resulting from chronic neuralgia. Over affected area there may be :—

(*a*) Loss of hair ;
(*b*) Growth of hair ;
(*c*) Change of colour (grey).

4. Hyperæsthesia in definite areas may exist.

5. Analgesia in certain areas if cause be compression of nerve trunk from growth.

Now a patient, probably a woman—for neuralgia is certainly commoner among women than men—and generally between the ages of 20 and 60, may be referred to you by a medical practitioner. She has been suffering from neuralgia for some considerable time, and the exhibition of drugs has afforded her no permanent relief. You are asked to ascertain whether there is any dental cause for her trouble. The patient may be confident that her teeth are not at fault because she has had no toothache.

How are you going to make and conduct an examination to ascertain if there is any dental cause for the neuralgia ? Let your examination be systematic, routine and thorough. Your first inquiry will be as to the site of the pain. There are certain spots about the head and face which we are accustomed to speak of as neuralgic foci, and inasmuch as reflex dental pain never crosses to the opposite side of the face, the site of the pain, left or right, is an aid to diagnosis. We know therefore from clinical experience that certain pain spots are commonly associated with certain teeth, so, you see, we begin to narrow our investigation down.

The neuralgic foci correspond to :—

1. The point or exit of branch of nerve from a foramen in the bone. Supra-orbital, infra-orbital, mental.

2. The situation of a superficial nerve plexus is over the malar bone and over the temple.

3. Anterior and superficial part of ear and auditory canal.

(N.B.—Lower and back part of ear is supplied by great auricular from the cervical plexus second and third cervical nerves.)

These spots are associated with the teeth thus :—

Maxillary

Incisors, Canines, Premolars, Molars	Infra orbital, upper part of temple	Eye and supra orbital	Parietal

Mandibular

Incisors, Canines	Mental		
Premolars	Mental		Parietal
	Ear		
Molars	Neck to shoulder		

Sir Henry Head mapped out the head and the face, as well as other regions of the body, into segmental areas of hyperæsthesia ; that is to say, areas of tenderness which may be ascertained by going carefully over the skin surface with the head of a pin, or by pulling gently hair covering the part. By these means the exact extent of the area involved was located.

Head has gone so far as to link up certain areas of hyperæsthesia as being associated with lesions of certain particular teeth :—

(*a*) In the maxilla—

	Associated with
Incisors	Fronto-nasal area.
Canine, 1st Premolar	Naso-labial area.
2nd Premolar	Temporal or maxillary area.
1st Molar	Maxillary area.
2nd Molar, 3rd Molar	Mandibular area.

(*b*) In the mandible—

	Associated with
Incisors, Canine, 1st Premolar	Mental area.
2nd Premolar	Mental (?) area.
1st Molar, 2nd Molar	Hyoid area.
3rd Molar	Sup. laryngeal or hyoid area.

Now I want you to get quite clearly in your mind the difference between those spots which I have spoken of as neuralgic foci and those areas of hyperæsthesia. The former—neuralgic foci—are points at which the patient feels the pain centre. The latter—segmental areas of hyperæsthesia—are spots which are hypersensible to touch.

Now, what lesions of the teeth and their attachments may give rise to the symptoms we have just considered ? They may be found in the pulp, in the dentine, in the cementum or in the periodontal membrane.

1. Morbid conditions of the pulp—

Inflammation—With or without infection ;
Irritation ;
Suppuration ;
Polypus ;
Degeneration ;
Intrinsic calcification ;
Pulp nodules ;
Traumatic.

The above conditions may all give rise to neuralgia.

2. Lesions of Dentine—

Caries, Erosion, Abrasion, Attrition, Fracture	Practically all produce pulp changes.

3. Lesions of cementum—
   Exposure from gum recession ;
   Absorption ; and
   Exostosis.
4. Lesions of periodontal membrane—
   Inflammation, acute and chronic ;
   Productive and progressive.

One or other of these lesions may be obvious as soon as you examine the teeth. It is therefore necessary that your examination be systematic and thorough.

With a sharp curved probe go carefully over the teeth, naturally turning your attention first of all to those which, from the site of the pain, are most likely to be involved. You will search for hidden cavities, especially bucco-cervical and approximal. You will pass waxed silk between the teeth and, if it frays or cuts, your suspicion should be aroused. An electric mouth mirror used in a darkened room will often reveal hidden cavities as well as dead and pulpless teeth.

If you fail to discover cavities you will submit each tooth individually to thermal tests. For heat use a hot burnisher or a small pellet of hot G.P. on the end of a burnisher. For cold use absolute alcohol or touch the tooth with a small pledget of cotton wool upon which you have sprayed some ethyl-chloride.

It is wise to pay particular attention to those teeth which have very large fillings. Copper amalgam as a filling material was largely used at one time, but, as you are aware, in some mouths it tends to waste, and that is one of the reasons why it has now gone out of fashion.

Modern amalgam alloys have a large content of silver, and sometimes a small content of zinc. Now, if you repair a " wasted " copper amalgam filling with one of these newer silver-tin-zinc alloys it occasionally happens that considerable pulp irritation is set up by the galvanic action established by bringing these two varieties of amalgam fillings into contact with one another.

But you must remember that all living teeth and, under certain conditions some pulpless teeth, respond to thermal tests. It is therefore necessary to regard the degree of response elicited, and to observe if it starts the neuralgic pain. Next, eliminate the presence of periodontitis by percussion or by applying sideways pressure to a tooth by means of finger and thumb or, best of all, by letting the patient bite upon a thick but narrow strip of card.

Radiographs will, of course, reveal such things as pulp, stones and other forms of intrinsic calcification and the changes due to periodontal disease, and X-Rays will also reveal to you buried roots, small pieces of dead alveolus and foreign bodies. Do not neglect to pass a bristle along open root canals. Live pulp elements may still exist near the apex. Above all, more particularly if your patient is between 17 and 30 and the site of the pain is about the ear or down the neck, suspect the presence of unerupted and impacted mandibular third molars.

If you take a sharp probe and thrust it into the back of the second molar you will strike enamel. You can feel at once that it is enamel you are in contact with, because the probe will not stick into it, as it will into the alveolar bone. A radiograph will reveal the true condition.

Remember that in nine cases out of ten of dental neuralgia the exciting cause is to be found in the pulp, and that uncomplicated periodontitis is not so likely to give rise to it. On the other hand, alveolar sepsis, particularly in the mandible, may track downwards and give rise to infection of the sheath of the mandibular nerve.

Again, chronic general oral sepsis is capable of establishing such a general lowering of the bodily resistance as to act as an active or marked predisposing cause of the general diseases I have already enumerated.

Now, the appropriate dental treatment you will be familiar with. If you cannot restore a tooth to a condition of perfect health do not hesitate to remove it. Never cap an exposed pulp which has given rise to neuralgia.

It remains then for you to treat and remove the peripheral irritation which is the exciting cause, co-operating with the medical practitioner in the treatment of any general condition acting as a predisposing cause.

And so, farewell.

The conclusion of Mr. Hopson's lecture was marked by tumultuous applause and cries for him to return as he endeavoured to slip out, and Mr. J. B. Parfitt expressed the thoughts of all present when he rose to speak :—

" As the oldest dental surgeon here, next to Mr. Hopson, I should like to say a few words.

" I have had the happiness of knowing him for nearly 36 years, and can say with truth that the longer one knows him the more does one appreciate his invariable kindness, tact, knowledge of affairs and practical wisdom.

" I really do not know what we at Guy's will do without him ; to me, indeed, it will all be a different and colder place.

" We must not, however, in our selfishness, grudge Mr. Hopson the change he is making. I say ' change ' advisedly. He is not retiring into inaction, he is not the one to do such a thing, besides he is a young man still in the full tide of life.

"As for the future, we are not losing him. He is one of our Consulting Dental Surgeons, and we hope to see him with us and to hear his voice—and always we know that his advice and experience will be at the service of the Hospital. I feel that it is a great satisfaction to Mr. Hopson, gazing at his young friends before him, to know that almost certainly there is one sitting in this theatre to-day who some quarter of a century or more hence will be wearing his mantle, will be the Senior Dental Surgeon of that time, directing the Dental School on its onward course.

"In conclusion, I know, ladies and gentlemen, that you will all join me in wishing him long life and happiness, which to him is synonymous with activity and service."

Dr. Fawcett supported, in a few words, the remarks made by Mr. Parfitt, and in particular alluded to his long friendship with Mr. Hopson and to the invaluable work which Mr. Hopson had done, not only for the Dental School, but for the Medical School and the Hospital.

Mr. Hopson's name was, he said, a household word wherever Guy's men were situated, and although he had no intention of speaking he felt he could not let the occasion go by without expressing to Mr. Hopson his own grateful thanks for help in many ways, and also the thanks of all the members of the Hospital and Medical School in those times past when they were working together.

Dr. Fawcett said that he knew no one who had done more for Guy's than Mr. Hopson, that all would experience a great and deep sense of personal loss in Mr. Hopson's retirement, and that both Mrs. Hopson and he had the best wishes of all Guy's men for good health to enjoy a somewhat larger period of leisure than had been his lot of recent years.

As soon as Dr. Fawcett had concluded his remarks all present proceeded to the Colonnade, where Mr. Hopson, accompanied by Mrs. Hopson, who had also been present at the lecture, passed through two ranks of students, who gave three cheers in his honour, and yet another three cheers, as he was driven off by Mr. Malleson in his car.

Reminiscences of Forty Years.

IT is 40 years since I entered Guy's. Before then my knowledge of the medical profession was centred in the person of our family doctor.

I can see him—50 years ago—coming to our house in his full box brougham. He had mutton-chop whiskers, and always wore the regulation frock coat and carried a short stethoscope in his silk hat and took snuff. His first remark to me was, "And how are we to-day?" which, I thought, was bad grammar.

He was very fond of ordering pulv. rhei co. which, I fancy, I can taste to this day.

I shall always associate Guy's with the curious odour of tanneries and hops that pervades St. Thomas's Street to this day.

There was another smell in the Colonnade which I soon found out was iodoform, which clung to the clothes of all who held surgical appointments.

At that time Mr. Lane was the Senior Demonstrator of Anatomy, and even then I could see he was a genius.

His great hobby was to demonstrate how long continued occupation could alter the shape of the bones.

I well remember the case of an old shoemaker who had quite altered the shape of his acromion process and depressed his sternum by pressure on his last, and the man who had developed a false joint in his lumbar region through bunkering coals.

The Senior Surgeon was Mr. Thomas Bryant, a courtly old gentleman with mutton-chop whiskers, who had been President of the R.C.S.

It was an intellectual treat to hear him lecture without any notes. His name is still remembered through his splint and Bryant's line in suspected fracture of the neck of the femur.

He used iodine freely in the form of a tincture in his dressings, thus anticipating its general use at the present day.

These were the "antiseptic"—as contrasted with the "aseptic"—days. There was only one operating theatre which could hold over a hundred spectators, who stood on benches raised one above the other.

The lowest seat was reserved for members of the Staff, and there would often be several of them waiting their turn.

A venerable person in the figure of Mr. Edward Cock would sometimes be present. He was a contemporary of Sir Astley Cooper, and his connection with Guy's dated back to the days of William IV.

He was a favourite with everybody, and had a most engaging stutter. For many years he lived near the Hospital instead of "going up West," as other men did when they made their names.

Numberless stories are told about him, of which I may be allowed to quote one. He married late in life, and Mrs. Cock tried to break him of his habit of taking snuff when at dinner.

Once she picked his pocket when they were dining out, and when he felt for his snuff box and found it missing he took a paper packet out of his pocket and, taking a pinch of snuff, said: "D-d-did you that time, my dear!"

His carriage was emblazoned with his arms—A cock rampant, with the motto, "While I live I crow." He was the inventor of the operation for the relief of acute retention of urine by perineal incision.

Mr. Howse, a most excellent surgeon, afterwards Sir Henry Howse and President of the College, always wore an ancient frock coat for his operations. The sleeves, when turned up, showed plenty of old blood stains.

He always used the carbolic spray, and the operation was performed in a sort of Scotch mist. I have worked the spray myself when I was his Ward Clerk. His results were excellent.

Many of the operations were performed in the wards behind screens as a consequence of the theatre being occupied, and I have often seen the cautery used for piles with the very unpleasant smell associated with that operation very much in evidence, which must have been rather disturbing to the other patients in the ward.

Erysipelas was by no means infrequent, and two wards, Patience and Samaritan, were specially reserved for such cases.

Great changes, however, were about to take place.

Dr. Steele, our old Superintendent, had died, and his place had been filled by the appointment of Dr. Perry from the London Hospital, one of the greatest organisers and reformers.

Under his rule the Hospital was completely changed. The surgical building was 160 years old, but by a miracle of skill was brought thoroughly up-to-date, and to-day we have no less than 15 theatres where the aseptic ritual is carried out to perfection.

Mr. Jacobson was a notable member of the Staff. He was Assistant Surgeon for more than 20 years, and his dressership was much sought after, as he was very generous in allowing his dressers to do operations and was an excellent teacher. His O.P.'s were always well attended.

He was the first man to take the M.C. Cambridge, and, the story goes, was shown a specimen he could not make out. When he asked the examiners they told him they did not know themselves, but thought he might be able to enlighten them.

I remember his book on Operative Surgery when first published, a work which still holds its own as the best book on the subject.

Mr. Symonds, now Sir Charters Symonds, was an Assistant Surgeon.

He has the honour of being the first man to remove the appendix.

As this operation is the chief means of livelihood to many a struggling surgeon, and without which many of them would be unable to maintain a wife and family, a few notes on this case may be of interest, extracted from Howard Kelly's large work on the appendix and its diseases.

"Charters Symonds, an Englishman, did what is undoubtedly the first external operation for appendicitis, making a lateral incision without opening the peritoneum," or, in Mr. Symond's own words in a paper read on May 9th, 1885: "I believe I am correct in saying that this is the first case in which a concretion or calculus has been removed from the appendix without at the same time opening an abscess, and the credit of whatever value rests in the procedure must be given to my lamented colleague, Dr. Mahomed, at whose suggestion the operation was undertaken, and who advocated the inguinal excision in opposition to that along the linea semilunares proposed by myself."

The operation itself was performed in Guy's on August 24th, 1883.

Nothing is more striking than our changed attitude as regards the appendix.

The treatment in my time was opium and starvation. If an abscess came to the surface it was opened. No one dreamed of cutting down on a recent subacute case as they do nowadays.

I have seen very large swellings form and gradually absorb without pus formation. A favourite application was oleate of mercury.

Of course, if pus came to the surface it was opened. If it burst into the rectum or vagina we said, "Thank God." If it burst among the intestines we signed the certificate "Peritonitis."

Drs. Pavy and Pye-Smith were the Senior Physicians, they were both F.R.S. Dr. Pavy was the great authority on diabetes. Dr. Pye-Smith was a most cultured man. I have seen him read extracts from Sydenham's work on Gout in Latin, translating as he went.

The great favourite was Sir S. Wilks, our Grand Old Man. Years after he was put on the Consultant Staff he would wander round the Hospital, his favourite haunt being the P.M. room.

Dr. Galabin was the Senior Obstetric Physician, and I expect some of the senior men present remember his *Midwifery and Diseases of Women.*

He had been a great mathematician at Cambridge, and could not help introducing his knowledge of mathematics into his book to prove which leg to bring down in performing version. Dr.

Horrocks used to say: "Take which comes first and thank Heaven you have got it!"

I did my month as Extern in December, 1890, and have still kept the notes of the 65 cases I attended in that time. In those days it was *de regeur* for the patient to be confined in her ordinary clothes, including vests. We were supplied with perchloride tabloids and eucalyptus vaseline. To this day the smell of eucalyptus always suggests midwifery.

If we got into difficulties then we sent for the Obstetric Resident, and if he did the same he sent for the Obstetric Surgeon.

There is a story that one day a call came when all the Externs and the two charities were out, and Dr. Galabin himself went to the case.

The next day when the Extern went the patient said to him: "I am glad you have come, doctor. The old chap they sent yesterday did not seem to know much about it, and did not help me a bit!"

I wonder how many drinks of gin I refused when doing Extern and Charity.

Affairs have improved immensely since those days.

The notorious Tabard Street has been swept away and replaced by model lodging houses.

I often wonder at the marvellous reparative powers of Nature and how it was that very few of the patients in the old days went wrong.

Even now, there is much to be done. Some of you may have read the article "Save the Women and Children," by Dr. Comyns Berkeley in the *British Medical Journal* of January 2nd, in which he says 700,000 women in this country undergo the pangs of childbirth annually, of whom 3,000 never leave their beds except in their coffins. In other words, about 1 in 250 confinements are fatal to the mother.

My own mortality figures must be about the average, and it may be opportune for me to recapitulate them.

(1) A woman whom I found unconscious on my arrival with uræmic convulsions, transfused.
(2) A similar case.
(3) Placenta prævia.
(4) A similar case.
(5) Pulmonary embolism.
(6) Puerperal fever. Cause—? not called in till third day.

In 1893 I was at the London Fever Hospital. This Hospital dates back long before the M.A.B. Hospitals were founded, and it was here that Sir William Jenner differentiated typhus from typhoid fever.

I remember my colleague showing me the pneumococcus as a great curiosity.

We used to get some very severe cases of scarlet in those days, and I remember a delirious patient pulling the entire back off his iron bedstead and breaking the iron rods, dying shortly afterwards with a temperature of 108°.

I published a little article on how to diagnose difficult cases of scarlet, but am much more humble now, and confess it is often impossible.

I have been M.O. to our local hospital for many years, and the more I see the less certain I become.

The Tyranny of the Bell.

THERE is a popular song now going the rounds of the "Vodvil"—the U.S. equivalent of the music hall—entitled *I Love the Song of the Bells*. This, needless to say, refers to the chimes of the local village church which, being synonymous with wedding bells, are supposed to conjure up a charming picture of romantic and conjugal bliss. Few married couples, however, dream of going together to the "Vodvil."

The noise of the dinner bell definitely gives rise to a sense of well being—what Pawlow describes as a conditioned reflex. Most people, too, are conscious of at least a minor thrill at the sound of the front door bell, although its ring usually heralds nothing more interesting than a bunch of bills.

All these bells may be justified as adding something to the sum of human pleasure. But there has been bred at the end of an electric wire another bell, the noise of which has increased beyond the limits of human endurance. The telephone, which was welcomed as a boon, has become a menace and a tyrant. Should the invention of "television," recently described in the papers, be added, life would become quite impossible. To prevaricate convincingly over the 'phone is hard enough, without having to look as if one meant it!

Against what may be called the domestic uses of the telephone there can be no complaint. If lack of beer for lunch or marmalade for breakfast can be prevented by a timely 'phone order, then Mr. Bell—or whoever invented the machine—is to be congratulated. It is the social and professional applications of the telephone that are to be deplored.

In the days when hansom cabs livened the streets with yet another permissible type of bell, Mr. A., if he wished to become further acquainted with Miss Jane, presented his card to her footman. And if Miss J. was in the middle of a delightful tete-a-tete with Mr. B., the footman politely answered

that the lady was "not at home." Nowadays Miss J.'s pleasant conversation is rudely interrupted by a bell. She, poor lady, not knowing whether the call is from her dressmaker or only the vicar, dare not neglect it, and so finds herself endeavouring to be suitably inviting to Mr. A. over the wire without queering her pitch with Mr. B. at her side.

This situation recurring a thousand times daily —though perhaps not so often to Miss J. herself —became impossible. But instead of cutting the Gordian knot by abolishing the telephone, or at least by modernising the footman into a confidential telephone bureau, the present generation decided to change its habits to meet the new difficulty. Acquaintanceships no longer have time to "ripen"—they must begin ripe. Mr. A. is plain Henry from the start, and takes Jane to the movies the first time they meet, although she regrets that she must be back by 9.30 p.m. to go to a dance with William B. Quite unabashed, Henry borrows Jane's telephone to invite the girl he met yesterday on the train, and perhaps all four succeed in having a "perfectly priceless time" together. They part with protestations of eternal friendship, and probably never see each other again. By enabling more to be arranged, the telephone definitely allows less to be enjoyed.

But, from the professional standpoint, the changes made by the bell are even more drastic. In the routine of a hospital the telephone has been made indispensable by altering the system of the former to suit the latter. When Ward Rounds were the only opportunity the Staff had of seeing their patients, the responsibility of treatment fell largely on the House Officer. He, during his morning and evening visits, tried to foresee and provide for all possible eventualities. The further responsibility lay with the Sister, who spent the greater part of her time actively treating the patients. When the Sister was away she took care fully to inform her Head Nurse of all necessary facts.

In the really modern hospital the telephone has revolutionised all this. An efficient exchange enables the visiting surgeon or physician to keep in constant touch with the ward. A supertelephone, ringing bells simultaneously in every room in the place, enables the nurse to appeal to the House Officer at a minute's notice. Perhaps the day will come when each patient will have a telephone at his bed and can ring up the nurse to demand either a pill or an operation.

Such a system may be defended on grounds of sheer efficiency. But, just as the X-Ray and the laboratory tend to lower the general standard of clinical acumen, so the telephone tends to abolish two important qualities—forethought and sense of responsibility. It may, or may not, be a good thing for a nurse to give drugs without definite orders, but the continual availability of the House Officer results in her taking no responsibility whatever. In fact, the ward duties have been divided among the nurses so that none of them is responsible for any particular patient, except the Head Nurse. She, poor woman, is so occupied in answering 'phone calls from anxious relatives and despatching calls for the House Officer that she has no time left to give to her patients. At the other end of the wire the House Officer's temper and constitution are ruined by continual interruptions, and the Visiting Surgeon, through over-anxiety, develops hyperpiesia and premature senility.

This gloomy picture bears, of course, little resemblance to the truth. More than one charming young lady may still be met without the intrusion of either Mr. A. or Mr. B. There are a number of distinguished medical men who have passed the age of 40, while House Officers and Nurses will probably continue to be much the same to the end of the chapter. At the same time, the growth of the telephone has undoubtedly destroyed a great deal of privacy at home and initiative at work. Perhaps if the Betting Tax is a success legal measures might be applied to this greater evil. When a 'phone message is important or welcome, the recipient would willingly pay the 2*d.* instead of the caller. For all purposeless, inopportune and superfluous calls a graded system of fines could then be levied on the sender. Eventually persistent offenders would be incarcerated, without the option, and for the period of the public pleasure. A ready solution of the National Debt problem would thus be provided.

Pass List.

University of London.

2nd Examination for Medical Degrees.

PART II

March, 1927.

W. H. Allan
E. Bellamy
F. W. Chippendale
H. J. Croot
W. J. Ferguson
C. Gross
G. M. Housden
A. N. Jones
D. T. Jones
W. D. G. Jones
B. R. Medlycott
R. B. Peckham
P. V. Reading
E. B. Rogers
S. A. Scorer
F. H. Stevenson
S. J. Wheeler
G. P. B. Whitwell

Change of Address.

J. G. Kingsbury, The Park Hospital, Hither Green, S.E. 13.

Surgical Case Taking.

SELDOM do readers of the GAZETTE have the pleasure of reading such a riot of Rabelasian wit and mordant humour as that lately provided by Mr. Billy Verdin, who has so obviously been a close observer of the habits of the late Ward Clerks on the —— Firm.

It was therefore a pity that the subject of case taking was not also dealt with in the same manner, for surely this calls for an equal amount of *Je ne sais quoi* and *pomme de terre*, and would well repay a few minutes' study.

Surgical case taking is the ideal culture medium for the growth of the professional manner, on the possession of which the success of the student will so largely depend; indeed, to be called doctor by a ward patient within a week of starting the appointment is a sure index of future skill. The pleasure I experienced when first addressed in this manner was somewhat marred by the fact that the patient was deaf and somewhat short sighted.

There are many attributes to the attainment of this manner, one of which is, of course, the discreet exhibition of a stethoscope. Here the Surgical Ward Clerk is at a disadvantage with the Medical Clerk, as the former must be immune to leg pulling before he will flaunt his "tubes" in front of his more intimate colleagues. If, however, it can be managed so much the better, but an ophthalmoscope or head lamp should never be worn.

The patient may now be approached and the ritual of interrogation in the best manner of the *agent provocateur* started:—

Occupation—If the patient is a female ask her if she is married. If so, exclaim: "Married! Ah, yes, the best occupation in the world." As a rule this goes down excellently, a friendly atmosphere being created at once. In exceptional cases, however, where dissensions have been the keynote of marital existence, this remark may cause a violent anaphylactic reaction, but the risk should be faced.

Address—Patients not living in the Old Kent Road usually live in the New Kent Road.

Name of Doctor—If it is not Dr. M. I. Stalba you can bet your boots it will be Dr. Colocynth.

F. H.—It is never necessary to draw up a genealogical tree, and any references to mother's-in-law are quite uncalled for.

Urine—If the Clerk is pushed for time "Normal" can be written down. In cases like gangrene, nocturnal sword swallowing and geographical tongue, however, the urine should always be tested. The following is typical:—

Colour—Beige, russet brown.

Sp.Gr.—Not exceeding 30 u.p.

Deposit—Bank rate 3½ per cent.

Albumen—Well, yes.

Reaction—Very bad. A pamphlet on the cause of oscillation can be obtained from the B.B.C.

P.D.I.—Essential points only are required. Above all, avoid references to previous operations in the Hospital as this means that reports will have to be dug out of the Super's Office or the fusty depths of the Medical Block.

C.O.A.—This should be severely practical. Such descriptions as "a mountain of flesh," "must be seen to be believed," are not very helpful.

Operation—This should consist chiefly of technical details. Any remarks such as "Mr. Digitalis Hartshorn made two jokes during the operation, at which the dressers laughed discreetly," are uncalled for, and will be deleted by the Registrar. Hæmorrhage should be only mentioned to say that it was controlled easily.

After this it is not uncommon for nothing more to be added to the report until the Clerk either finds the bed empty or containing a new patient. It is then advisable to nip down to the P.M. room and see if any reference to the patient can be found there—if not, finish writing up the report saying that the patient made a complete recovery.

Having made a brief synopsis of the case on the front page of the report, it should then be placed at the bottom of the pile in the Registrars' room.

By the time you have done this you may realise that you have no initiative left, but the fact that you have put the report at the bottom of the pile shows that you still retain the queen of all virtues—discretion.

"GRIDIRON."

Notice.

A DANCE will be arranged by members of the Hospital on Friday, May 20th. Price of Double Ticket will be, as before, 8s. inclusive. Support is earnestly hoped for to enable the Hospital to benefit. Fuller details as to time and place will be published in our next issue.

Guy's Hospital Employees' Association.

President: H. L. EASON, Esq., C.B., C.M.G., M.D., M.S.

THE Sixth Annual General Meeting of the Guy's Employees' Association was held in the Common Room on Thursday, March 31st, 1927.

The Chairman, Mr. W. J. Curry, in presenting the Annual Report of the Executive Committee for the year, drew attention to the various activities of the Association. A series of very successful Whist Drives had been held during the year. Tennis and Football matches were played with the Students and, although the Association lost on each occasion, the games were much appreciated. The Fawcett Challenge Cup (Men's Singles) was won by Mr. G. A. R. Winston for the second time. Through the generosity of Dr. A. P. Beddard, a Challenge Cup will in future be available for Lady Members. A Table Tennis outfit has been provided in the Common Room for the use of members. This has proved to be very popular.

The Annual Dinner of the Association was held in November, 1926, at the Bridge House Hotel. The fact that over 150 people again dined together is ample proof that the Dinner has now become a well-established function. Arrangements are being made to hold the next Annual Dinner in November, 1927.

Mr. J. H. E. Winston was unanimously elected Chairman for the ensuing year and Mr. L. Goodliffe Honorary Secretary, in place of Mr. W. F. Cook.

The Accounts of the Association for the past year are as follows:—

Statement of Receipts and Payments for the year 1926.

RECEIPTS	£ s. d.	£ s. d.
Subscriptions—		
Mr. Goodliffe's List	2 5 9	
Mr. Muir's List	3 13 6	
Mr. Brereton's List	1 1 0	
Mr. Butler's List	10 6	
		7 10 9
Entrance Fees		4 19 6
		£12 10 3

PAYMENTS	£ s. d.	£ s. d.
Refreshments	3 7 0	
Prizes—		
Tennis	2 15 6	
Whist Drives	1 5 11	
Insurance	6 6	
Christmas Gifts	15 0	
Typing	8 6	
Ping Pong Outfit	19 6	
Printing, etc.	1 7 6	
		11 5 5
Excess of Receipts over Payments for the year		1 4 10
		£12 10 3

BALANCE SHEET, December 31st, 1926.

LIABILITIES	£ s. d.	£ s. d.
Accumulated Funds—		
Amount brought forward from last Account	28 18 4	
Add—		
Excess of Receipts over Payments	1 4 10	
		30 3 2
Dinner Account—		
Amount brought forward from last year	14 0 0	
Add—		
Balance transferred from 1926 Account	11 5 4	
		25 5 4
		£55 8 6

ASSETS	£ s. d.
Furniture—	
At Valuation	10 0 0
Stock, etc.	20 0 0
Cash at Bank	25 8 6
	£55 8 6

We have compared the above Statement of Receipts and Payments with the Books and Vouchers of the Association, and find it in accordance therewith. Certificates have been produced to us in verification of the Stock and Cash in hand.

F. H. BECKWITH } *Auditors*
W. R. SALTMARSH }

Landon Out-Patient Tea Fund.

Statement of Receipts and Payments for the year ended March 1st, 1927.

RECEIPTS	£	s.	d.	PAYMENTS	£	s.	d.	£	s.	d.
Donations and Collections (as per List)	106	14	6	Cost of Tea, Groceries, Provisions, Fruit, etc.	25	19	8			
Interest on Invested Funds and Deposit	8	7	6	Band	12	12	0			
				Gifts of Toys, Clothing, etc.	23	3	1			
				Police Fees, Gratuities, etc.	8	10	8			
				Printing, Postages, etc.	4	17	10			
				Decorations, etc.	3	4	6			
								78	7	9
				Balance, being Excess of Receipts over Payments				36	14	3
	£115	2	0					£115	2	0

BALANCE SHEET, March 1st, 1927.

LIABILITIES	£	s.	d.	ASSETS	£	s.	d.	£	s.	d.
Accumulated Funds—				*Investments*—						
Amount brought forward from last account	262	18	8	5% War Loan, at cost				150	0	0
Add—				*Cash at Bankers*—						
Excess of Receipts over Payments	36	14	3	Deposit Account	125	0	0			
				Current Account	24	12	11			
								149	12	11
	£299	12	11					£299	12	11

(Signed) BERTHA MARTIN,
Treasurer.
Salomons Welfare Centre, S.E.I.
March 29th, 1927.

Audited and found correct.
(Signed) W. J. CURRY,
Corporate Accountant, Auditor.

Guy's Hospital Maternity Samaritan Fund.

For the Provision of Food, Clothes, Coal, Medical Comforts and other Necessaries for Destitute Mothers.

Statement of Receipts and Payments for the year ended December 31st, 1926.

RECEIPTS	£	s.	d.	PAYMENTS	£	s.	d.	£	s.	d.
Subscriptions and Donations (as per List)	28	19	6	Food and Coal		2	4			
Interest on Deposit	3	0	0	Nurses' Expenses	10	6	8			
				Nurses' Requisites	1	19	5			
				Travelling and Ambulances	2	5	6			
				Printing, Stationery and Postage		3	0			
				Sundries		1	0			
								14	17	11
				Excess of Receipts over Payments, carried to Balance Sheet				17	1	7
	£31	19	6					£31	19	6

BALANCE SHEET, December 31st, 1926.

LIABILITIES	£	s.	d.	ASSETS	£	s.	d.	£	s.	d.
Accumulated Funds—				*Cash at Bankers*—						
Amount brought forward from last Account	158	13	9	Deposit Account	100	0	0			
Add—				Current Account	73	6	6			
Excess of Receipts over Payments for Year	17	1	7					173	6	6
				Petty Cash in Hand				2	8	10
	£175	15	4					£175	15	4

Audited and found correct. (Signed) W. J. CURRY,
Corporate Accountant, Auditor.
March 29th, 1927.

Guy's Hospital Missionary Society.

Receipts and Payments for the year ended December 31st, 1926.

RECEIPTS	£	s.	d.	PAYMENTS	£	s.	d.	£	s.	d.
Balance brought forward—				Subscriptions to other Funds	16	16	0			
Cash at Bankers	20	0	0	Printing and Stationery	3	5	4			
Subscriptions and Donations	22	19	6	Postages, etc.		11	6			
Interest (as per Post Office Book)		9	3					20	12	10
				Balance carried forward—						
				Cash at Bankers				22	15	11
	£43	8	9					£43	8	9

Audited and found correct. (Signed) W. J. CURRY,
Corporate Accountant, Auditor.

March 25th, 1927.

Nursing News.

IT was with the feeling that we were losing a personal friend that we said goodbye to Miss Hogg on Saturday, April 9th. The position of Matron at a large Hospital such as Guy's is no sinecure, and probably no Matron of Guy's has had a more difficult time than has Miss Hogg in the last 10 years. The responsibilities, if one stays to consider them, are enormous. To enforce some kind of discipline, such as is necessary for the peaceful living together of hundreds of women, needs some courage and personality, and Miss Hogg has had this problem to tackle at a most difficult time, when, owing partly to the war, ideas of womanhood and work have been in a state of transition. To feel secure of this discipline, and yet to let all her staff feel sufficient freedom from restraint, was a task worth attempting, and Miss Hogg seems to us to have succeeded in this, and at the same time to have maintained throughout her charm of manner and absolute lack of bitterness or hardness. Hundreds of Nurses who have worked with her testify to this.

To revert to only one or two of the difficulties which have confronted the heads of large Training Schools during the last decade. As a result of the war so many professions were opened up to women that for some years there was the great problem of obtaining the right type of nurse. It was quite a new thing for Guy's to have little choice in selection of candidates instead of having a long waiting list from which to pick and choose. The fact that, in spite of the shortage, the standard of training has been so well maintained reflects great credit on the Matron responsible for that training.

Then, no sooner was this difficulty beginning to right itself than State Registration for Nurses came into force. No one except those who have had to deal with it have the slightest conception of the endless thought and reorganisation entailed. Lectures, classes and practical work have all had to be brought into line with a new syllabus and upwards of 40 nurses entered for examinations thrice yearly. In addition to this, Miss Hogg has ever kept in mind her ideal of improving nursing conditions. Nurses' hours on duty have been shortened, and the actual ward work necessarily curtailed. The result of these efforts—for small alterations mean much effort in a large organisation—is that Guy's is well ahead, and need not fear comparison with any other Training School.

Apart from work, the social side of Hospital life has received every encouragement from Miss Hogg. The debt on the Nurses' Cottage at Honor Oak Park has been wiped off recently, and only last year Miss Hogg presented a Silver Cup to be competed for yearly by Swimming Teams of the Nursing Staff, the Massage and Electrical Departments.

We should also like to add, on behalf of the Sisters who have worked with Miss Hogg, how much we have appreciated her unfailing interest in all our work and difficulties, and the inspiration and courage we have always gained from her to carry on and do our best for the great Training School to which we are privileged to belong. May we long remember her philosophy of life and imitate her great patience.

We should like here to express our gratification at the appointment of Miss MacManus as successor to Miss Hogg. We wish her all happiness and success in her new office.

On March 31st Miss Gladys Dobson was appointed Third Night Sister, to take the place of Miss Hope Lucas who, owing to the illness of Miss Dorothy Holland, is doing temporary duty in the Preliminary Training School.

Reviews.

Guy's Hospital Reports. Volume 77 (Volume 7, 4th Series). No. 1, January, 1927.

IN addition to the usual series of cases of interest from Clinical, the current issue of the *Guy's Hospital Reports* contains much of value and even more of interest.

Dr. Knott's most careful review of the role of achlorhydria in intestinal infection and its possible bearing on the pathogenesis of Addison's anæmia and subacute combined degeneration of the cord contains observations made on a series of 200 cases in which the duodenal contents have been investigated. He also backs up his deductions by a good deal of experimental evidence.

Mr. Morgan and Dr. Symonds describe a series of cases with rapid onset of unequal pupils and failure of accommodation, which they attribute to attacks of encephalitis lethargica.

Mr. Ormond's four cases of disc-like degeneration of the macula lutea are carefully described and most admirably illustrated.

Dr. Hurst's article on the tone of the stomach as visualised by the radiographic appearances is of great value, and attempts to distinguish clearly between size, position and shape. He regards the distance between the upper surface of the contents of the stomach and the diaphragm in the erect position as the best indication of the tone of the gastric musculature.

Dr. Ryle describes a case of œsophageal spasm with severe anæmia.

Mr. Richard's investigation appears to demonstrate the association between general static hypotonus in children and lymphoid (tonsillar) hyperplasia. It would be interesting to know whether in his series of cases there was any antecedent history of rickets or whether any other clinical evidence of rachitic changes was present.

Mr. Evans gives a most complete account of a case of extra-uterine gestation at term, and is to be congratulated on his scholarly and detailed analysis of 33 similar cases published in the literature during the period 1920–24.

Part V of the Massage and Remedial Exercises Series has been devoted by Dr. Hurst to asthma. He is at pains to distinguish between the changes produced by uncomplicated asthma and true emphysema. He affirms that loss of elasticity and atrophy of the walls which separate the alveoli of the lungs does not occur in the former condition, but the evidence is not stated. However, the number of cases which remain uncomplicated for long must be small, and the exercises described seem to us to be well adapted both for asthma, complicated asthma and even for emphysema. Mr. Ogilvie, the Assistant Editor, records two cases of epitheliomata occurring simultaneously in different parts of the body.

Correspondence.

How Listerism came to Guy's.

DEAR SIR,—*the centenary celebrations that* have been carried out during the current week—April 4th–7th—have done justice to the memory of a great benefactor, and the story of Lister's coming to London has been told in the fullest detail. But of all the London surgeons in the early seventies, only two can be said to have been pioneer enthusiastic disciples and practical followers of the new teacher. They were Mr. Marcus Beck, of University College Hospital, and Mr. H. G. Howse, of Guy's—afterwards Sir Henry Howse, President of the Royal College of Surgeons.

Of Mr. Howse's dressers during those earliest days very few are still living. The late Sir Henry Davy, the late E. R. Mansell and H. R. Manby were my immediate colleagues. Dressers in those days held office for six months, and had responsibilities usually devolving on House Surgeons.

The introduction of carbolic spray as a means of sterilising wounds was met at first by ill-disguised contempt on the part of seniors, and by very undisguised ridicule on the part of junior colleagues in the "Rooms." Many were the difficulties and disappointments that had to be met and lived down. The spray itself was the chief object of controversy, and as it was then pumped by hand, and by the Ward Clerks attached to the case, mishaps were not infrequent. Momentary inattention might direct the spray over the surgeon's head instead of his hands, pools of tepid spray were apt to accumulate and get spilt, and occasionally the sprays failed altogether. In spite of this clumsy method, which was soon superseded by the steam spray, the results obtained were too obvious to be ignored. Wounds healed under the first dressing, and cases that usually remained for weeks in the wards were passed out in less than half the accustomed time.

A very marked difference, too, began to be noticeable in the conditions of Mr. Howse's wards by comparison with those under the charge of the older surgeons, and one by one the younger members of the surgical staff realised and began to practise the new methods. But it was to the determination and perseverance of Sir Henry Howse that Guy's men owe their introduction to Listerism, and as one of the oldest of his pupils at that time, I hope I may be allowed thus to recall the fact.

Yours faithfully,

E. CLIFFORD BEALE.

DEAR SIR,—The Lister Centenary celebrations, which have just taken place, prompt me to write and remind the readers of the GAZETTE that it was Sir Henry Howse, to whom I held the appointment of Dresser, who was one of the earliest—if not the first—to introduce Lister's methods to London. Early in 1870, and that is a year before Lister's address in Plymouth, Howse went to Edinburgh on purpose to study under Lister. He came back to Guy's and at once practised the antiseptic system in his wards. Not long before his death he wrote to me: "In the erysipelas wards we often had to do amputations and other severe operations in beds surrounded by most highly infectious erysipelas cases and by severe septic cases such as gangrene and urinary extravasation. It was a discovery, it was a most remarkable phenomenon to us to find that we could operate on these cases in the erysipelas wards with the spray and antiseptic dressings as safely as we could in the general wards or private rooms."

Yours sincerely,

W. HALE-WHITE.

April 7th, 1927.

Sport.

Association.

Guy's v. Borough Market.

THE annual game with the Borough Market, by which they raise a considerable sum of money for the Hospital, was played at Honor Oak on March 9th. This year, to help the attendance, the market was closed for the afternoon, so that a large crowd gathered to watch the game. The turf was heavy, but the game that ensued was quite fast and very enjoyable, raising much amusement among the crowd. The Market won comfortably by 5–1.

At the start Guy's looked like holding their own, but while the Market rapidly settled down to a thrustful game Guy's became very shaky in attack and defence.

T. Francis, playing outside right for the Market, was very fast, and persistently caused trouble to Guy's defence. He scored a very fine goal towards the close of the game. The first three of their goals were all scored by the inside right, H. Constable, while the fourth was a fine long range shot by the centre half, A. Bass. For Guy's E. E. Evans scored.

It was unfortunate that L. S. Williams, J. W. Small and E. Fulford were all away owing to ill-health, while J. White, having left the Hospital, was unable to play at back. We look forward to next year's game, when we hope to win again.

Mr. W. E. Fitt refereed the game, and very kindly gave his services for the afternoon.

Guy's Team—W. D. P. Evans; D. Ellis, D. E. C. Robertson; K. Bruce Pearson, D. B. Smallshaw (capt.), H. Ginn; L. Ashling, — Fitzgerald, E. E. Evans, A. M. Cantor, — Robson.

Junior Hospitals' Cup.
Guy's v. St. Thomas's.

THE final of the Junior Hospitals' Cup was played between Guy's and St. Thomas's on Wednesday, March 23rd, on Bart.'s ground at Winchmore Hill, Guy's winning the Cup back for the second time in the last three years, having beaten Bart.'s in 1925 and lost to London last year. We were, unfortunately, unable to play Robson at outside left owing to the 2nd M.B. falling on the same day. His place was taken by Barwell, Henderson moving up from left half to inside right and Wren coming in at left half to inside right and Wren coming in at left half. We started off in a fine drizzle, which continued until half time, the ground being soft on top and rather slippery. In the first half the game was very even without much brilliance on either side. The first goal for us was scored by Cathié, who put in a good shot from close in to finish off a clever short passing movement in which he combined with Fitzgerald and Henderson. The second goal also came from Cathié. St. Thomas's scored their first goal just before half time, making the interval score 2–1 in our favour; not a very favourable lead with which to start the second half against

the wind. In the second half the game was very much more keen, the outstanding feature being Stevens's play in goal—the hard shots were taken as clearly as the easy ones and cleared right down the field. The rearrangement of the forward line, with Henderson in the centre and Fitzgerald inside right, was also very successful, Fitzgerald and Allott playing well together on the right wing. In the first few minutes after the interval Henderson got through and scored with a hard low shot, and it was also Henderson who scored the fourth goal ten minutes later.

Towards the end of the game St. Thomas's forwards were pressing hard and looked like scoring on several occasions, but Stevens was very safe in goal and Wright and Ellis were on the top of their form.

Five minutes before time Cathié got through and scored our last goal, making the final score 5–2, which brings our cup tie record for this year up to 23 goals for to 3 against.

The game throughout was fought in a good spirit and, except for a certain amount of scrappiness in the first half, was well played.

Cathié 3 and Henderson 2 were the scorers

Guy's Team—R. W. Stevens; S. F. Wright, S. P. Ellis; Siggers, Bruce-Pearson, Wren; Barwell, Cathié, Henderson, Fitzgerald, Allott.

Hockey.

Senior Inter-Hospital Cup.

Final.

Guy's v. St. Thomas's.

THIS match was played at Richmond on Monday, March 28th, and resulted in a win by 4 goals to 1 for St. Thomas's, the holders of the Cup.

Guy's started well by obtaining the first goal of the game within a few minutes of the initial bully-off through a good shot by R. Catchpole (1–0). After this, St. Thomas's pressed, but Carrell got the ball away to Curtis. St. Thomas's continued to press for some time, till Willett, who played a wonderful game throughout, cleared to Cautley, who broke away and passed to Archer for the latter to miss by a narrow margin. These two were next again prominent, but the St. Thomas's goalkeeper saved well to a corner, from which Catchpole missed scoring in front of an open goal. Curtis put in several good rushes and centres, which were fruitless owing to the very sound marking of the St. Thomas's left back.

The St. Thomas's right wing now put in a hot centre, from which their centre forward scored (1–1). This was again repeated, but Camps saved the situation. A third attempt, however, from the same quarter found our backs sadly out of position, and a further score for St. Thomas's resulted (1–2).

After half time Willett and Carrell were very prominent in coping with some determined rushes by our opponents' forwards, and Guy's were forced to a corner, which Howitt cleared, for Guy's to attack, but two good opportunities of scoring were lost through manœuvring for position instead of shooting at once. The St. Thomas's outside right now got possession and ran through our defence, which was too far up field and badly placed, to score their third goal (1–3). The next goal by St. Thomas's was a gift, as again our defence was at fault in a similar manner, leaving Smith with the impossible task of tackling three men (1–4). St. Thomas's maintained their superiority, one shot going over the top of our goal and another hitting the head of one of their own forwards, till the end of the game, despite some good work by Archer, Cautley and Curtis. Archer on one occasion broke through on his own and had hard luck in not scoring, the ball going just wide.

St. Thomas's won by discovering our weak spot in defence, for it is an impossible task for one back to cope with three fast forwards when the other wanders up field and cannot get back in time. Sykes played well, but had to mark their outside right, who was too experienced for him.

In conclusion, mention must be made of the poor support given by Guy's hockey men to their 1st XI. There were not more than half-a-dozen Guy's supporters—past and present players—on the touch line, while there were quite 60 or 70 St. Thomas's enthusiasts present. Unfortunately, the Guy's men arrived just after Catchpole had scored for us, and consequently his effort was not acclaimed from *any quarter whatsoever*! After all, Guy's men, playing for Guy's in the Final of an Inter-Hospital Competition, deserve better support than this, and it is hoped that next season will see an improvement in this direction, as it does help a team to be cheered on by friends.

Guy's Team—R. E. Smith; F. E. Camps, G. N. Carrell; C. N. Howitt, J. E. Willett (capt.), R. A. Sykes; A. H. Curtis, R. L. Cautley, C. A. W. Archer, R. Catchpole, H. O. Lyne.

Births.

ORD—On March 11th, 1927, at Normanhurst, Cavendish Rd., Southsea, to Grace, (née Comber) wife of A. G. Ord, F.R.C.S., Ed., a daughter.

WHITE—On April 5th, 1927, at 12, Ripon Rd., Harrogate, to Dorothy, wife of Ernest White, a daughter.

EDS. { P.F.S.C. G.M.H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *May 7th, 1927.* *Number 1012*

PASSIM

OF the many problems with which the Public Health Authorities have to deal, that of overcrowding in slum areas is perhaps the most difficult. In all large cities these areas, which might be likened to foci of sepsis, fester continually and distribute their poisons through the State.

To guage with any accuracy the possible effect on the health and psychology of the nation of the complete elimination of slums is impossible, but there seems little doubt that, apart from any other consideration, it would eventually be financially sound to have the labouring classes hygienically housed. This has been proved abundantly by such conditions as exist at Port Sunlight, Bournville and several other communities of a similar nature.

As a student one is very soon struck by the futility of a large part of medical practice, the part that is occupied in the attempt to cure diseases which are firmly established and often fails even to alleviate. Much of this disease can be traced to unsanitary surroundings acting from the very beginnings of patients' lives.

The problem of rectifying these conditions resolves itself into the provision of healthy houses, adequate food and a clean atmosphere, with resulting benefits of sunlight.

In a recently published book by Lieut.-Col. Fremantle,* an old Editor of the GAZETTE, the question of hygienic housing of the nation is thoroughly discussed and the tremendous difficulties in the way of abolishing slums are clearly indicated. Occupied as one is at the Hospital with only the diagnostic and therapeutic aspects of disease, one is very apt to neglect entirely the wider views of public health—a fact rather to be deplored, as it is, if anybody, the medical man who is in the position to influence the public in matters of healthy living.

The first portion of the book is devoted to the review of the various schemes put into force by the Governments from the time, in 1917, when it was realised that should the war end in the following year 300,000 houses would be required. To one who is sufficiently ignorant of the details of National finance to be only interested in the alterations of the price of beer and tobacco, the actual significance of the expenditure on the various schemes is lost, but what does stand forth from Colonel Fremantle's book is the fact that strenuous efforts have been made to improve housing conditions and, though the immediate prospects of lessening the conditions of overcrowding are not as satisfactory as they might be, the increased facilities of transport and the schemes of wide distribution of cheap electrical power are causing factories—and we hope, we think not too optimistically, clean factories and not unsightly structures vomiting into the air disgusting vaporous muck—to move into the country. Here, if the schemes for garden cities bear fruit, they will be surrounded by healthy and well spaced homes. It seems to us that with easy transport the necessity for congested areas of population, to a great extent, disappears and there is the hope that the day of the large growing city, like a malignant neoplasm crawling out along its lymphatics, is closing. There is perhaps too much of the stuff dreams are made of about this, but after all it is only comparatively recently that slops were emptied out of the front windows, and the rate of progress increases daily, even should the population increase, in spite of Dr. Marie Stopes, to the extent of converting the land into one large town, if it

* The Housing of the Nation. By Lt.-Col. Fremantle, M.P., F.R.C.P., F.R.C.S., D.P.H. Philip Allan & Co., Ltd. 8s. 6d.

is planned on the principle of the ideal vllage near Weybridge, designed by the founder of Whiteleys, the outlook is not too unplesaant.

One of the incidental signs of Spring is the discovery of patches of pigment on various parts of one's clothing as the result of missing the warning "Wet Paint!" or darting at the wrong moment under scaffolding supporting an army of painters. We have been asked to contradict the rumour that the ceiling of the Colonnade is to be decorated with scenes of dramatic surgical activity after the style of Michael Angelo in Italian cathedrals.

In accordance with previous custom, this present number of the Gazette, the first issue in May, is a Publishers' Number. We would call the attention, especially of student readers, to the many advertisements from book publishers and from the manufacturers of dental and surgical instruments and appliances, as well as to the Review column, in which the latest publications are reviewed. It is the endeavour of the Gazette in dealing with these books to note particularly those which may be of service to the student during his medical curriculum.

We feel it would interest our readers, especially those who knew him personally, to know that two anonymous donors sent large boxes of flowers to the Hospital at Easter time in memory of the late Dr. Hunt. Some of these flowers were put into the Chapel with the labels attached.

The following House Appointments have been made:—

House Physicians—
To Dr. Beddard, Mr. L. R. B. Birt.
Dr. Hurst, Mr. G. T. Hankey.

House Surgeons—
To Mr. Steward, Mr. L. S. Williams.
Mr. Rowlands, Mr. R. C. Brock.

Out-Patient Officers—
Messrs. E. D. Y. Grasby, E. J. Pye-Smith, F. G. T. Sale, S. R. Trick.

Assistant House Surgeons—
To Mr. Hughes, Mr. S. C. H. Lane.
Mr. Davies-Colley, Mr. J. M. Turner.
Mr. Bromley, Mr. S. L. A. Clarke.
Mr. Slesinger, Mr. G. B. Picken.
Mr. Ogilvie, Mr. E. T. Clifton.

House Surgeon in the Throat and Ear Department—
Mr. R. Jarman.

Resident Obstetric—
Mr. H. W. A. Post.

House Physician for Diseases of Children—
Mr. D. C. M. Ettles.

Clinical Assistants—
To Mr. Mollison, Mr. J. C. Neely.

On going to press we hear with the deepest regret of the sudden death of Prof. E. H. Starling. One of the most distinguished of the physiologists of modern times, Prof. Starling did the whole of his studentship at Guy's, and was House Physician to Sir W. Hale-White in 1889. After this he passed into the Physiological Department, where he first demonstrated and then lectured until he left Guy's to continue his physiological researches at University College.

We hope, in a future number, to publish an Obituary Notice of this famous old Guy's man, and we offer our sincerest sympathies to his relatives in their sudden bereavement.

Appointment.

Wm. Arthur Young, appointed Pathologist to the Medical Research Institute, Kuala Mimpur, Federated Malay States.

Change of Address.

Cecil G. Siggs, "Struan," 75, Beaconsfield Road, Blackheath, Kent.

M. D. Price, P.O. Box 12, Featherston, New Zealand.

C. P. Blacker, Somerset Hill, Holmbury St. Mary, Dorking, Surrey.

B. L. Laver, 1, Billing Road, Northampton. 'Phone: Northampton 18.

A. Moore, The Orchard, Croham Road, South Croydon.

Wm. Arthur Young, Medical Research Institute, Kuala Mimpur, Federated Malay States.

H. B. Bolus, 21, Eaton Mansions, S.W.1.

G. B. Dowling, M.D., F.R.C.P., 28, Devonshire Place, W.1. 'Phone: Mayfair 3647.

L. Gower Hemmings, Maybury Lodge, High Street, Thames Ditton. 'Phone: Kingston 3031.

Ferdinand W. Sander, L.D.S., R.C.S.(Eng.), 38, Victoria Road, Deal.

James A. Hudson, L.D.S., Glenfield, 431, Pinner Road, Harrow.

J. L. Lean, Surg.-Lieut., R.N., H.M.S. *Adventure*, c/o G.P.O.

A Survey of the Materials used in Denture Bases

A Paper read before the Dental Society by C. S. HENDERSON.

I PROPOSE to deal with my subject under two headings: Firstly, the materials used for denture base construction and, secondly, materials for continuous gum work.

Materials for Denture Bases—

The subject matter of this heading is influenced by a series of lectures I had the pleasure of listening to a short time ago, delivered by Doctor Rosenheim, the Director of the National Physical Laboratories. As you probably know, the National Laboratories are carrying on certain research work in order to ascertain more fully the physical and mechanical properties of the metals and alloys used in dental practice, and Dr. Rosenheim's paper contained some of the results so far obtained from these investigations. Although my paper is confined more to the mechanical properties of the metals and alloys used, I have also attempted to introduce some of the physical properties which are of interest to the prothesist. Within the scope of this paper also come certain non-metallic substances which are used in denture construction, such as vulcanite and the so-called resinous compounds, which go under different names—Oberlanger, Dentolith, Walkerite, etc. I think we must agree that our work in this branch of dentistry cannot be attended by the best results until we have a sound knowledge, elucidated by scientific research, of the properties of the materials we are in the habit of using. It is of the utmost importance when compiling the construction of a denture base first to carefully investigate the nature and condition of the mouth and then to select the material which appears to be most suitable for the case. Of course, in certain cases, due to the financial position of the patient, we are left no choice, but the material used in such cases—I refer to vulcanite—is most satisfactory for a large majority of cases, and is probably the most popularly used material at the present time. I remember once being severely reprimanded by our Director of Prothetics for suggesting that the financial position of the patient should come into consideration, but I again venture to suggest it has unavoidably to be considered, for not only have we to construct bases from the most suitable material, but also to supply ourselves with such necessities as will maintain us in a position to continue doing so. When I previously referred to the mechanical properties of metals I intended to imply by this term such properties as malleability and tenacity as opposed to their internal structure and composition, which are physical properties. Before proceeding to a survey of the properties of the materials used in dental practice perhaps it would not be out of place to consider at this point the properties required of an ideal material, whether metallic or non-metallic, for a denture base. I suggest the following may satisfy the case, although not attempting to arrange them in their order of merit:—

(1) A material entirely resistant to the action of the fluids present in the mouth. The reason for this property is two-fold: Firstly, in consideration for the patient, since it no doubt would be rather obnoxious to the average denture wearer to be forced to tolerate a plate, the bright surface of which has become replaced by dark precipitate. Secondly, lest any inorganic salts might be produced which would have an injurious effect on the patient's general health. Incidentally, the discolouration of plates is not always due to the action of the saliva.

(2) It must be capable of a uniform polish of a high degree so as to minimise the adhesion of particles of debris to the denture.

(3) Sufficiently strong to withstand the forces to which it is subject in the mouth and capable of being used in as thin a state as possible. This point is rather important, since a large number of patients cannot tolerate the reduction in size of their oral cavity by a thick vulcanite or aluminium denture, and this is one of the disadvantages attached to the use of vulcanite or aluminium for denture bases.

(4) Of a high specific heat and devoid of irritant action on the oral tissues.

(5) Finally, it must be a material easily and quickly worked and, in the case of fracture, easily repaired. I think a parallel might be drawn between this last property and the necessity for painless operations in conservative work, since they will both allow of the necessary operations being carried out in the minimum of time. The question of speedy reparation of fractured dentures is very important, since we must always be prepared for the emergencies arising from a patient fracturing a denture a few hours before his or her attendance at some important function and imploring you to come to the rescue.

Following the ancient custom of the alchemist, I propose to divide the materials used for denture bases into metals and non-metals, and to deal with the latter materials first.

Non-Metallic Materials—

Under this heading comes vulcanite. In dental practice vulcanite is obtained by heating together a mixture of two parts by weight of sulphur with one part by weight of natural rubber or caoutchouc, together with certain inorganic salts for varying the colour. The actual composition of the various "rubbers" are trade secrets, but analysis shows that generally the sulphur and rubber are present in a proportion of two to one, whilst the various colours are obtained by adding, in the case of "red rubber" vermilion, and vermilion and zinc oxide in pink rubber. Black rubber is obtained by adding ivory black or drop black to the mixture of sulphur and natural rubber. It is not necessary for me to go into the technique for producing vulcanite dentures, as it is only too familiar to you. Such hardened rubber is not acted upon by the fluids in the mouth to any extent. It is capable of a high polish, but which it does not seem to retain for any considerable time in the mouth. No doubt the use of abrasives for cleaning vulcanite dentures tends to shorten materially the life of the polish. It is strong and elastic and can be easily adapted to contours of all kinds. It can be used in a fairly thin state, provided it is strengthened with a perforated gold plate. Its final preparation before insertion in the mouth can be easily accomplished. So far, vulcanite fulfils the properties required for an ideal denture base, but its use is accompanied by several disadvantages. It is a non-conductor of heat, and consequently proper radiation of heat from the tissue cannot take place. This is said to cause absorption of the underlying bone, and sometimes vulcanite dentures cause irritation of the soft tissues. Some authorities deny the irritative action and attribute it to the use of poor quality rubber. Others assert that it is caused either by the mercuric sulphide present in the rubber as colouring matter, which can be overcome by using dark brown rubber which contains no colouring matter, or by the fact that the soft tissues lose their vitality when covered by a vulcanite denture. It is a fact worth noting, however, that when people, who are accustomed to wearing upper dentures, drink warm fluids without them they experience a degree of temperature of the fluid much higher than is actually the case. After all, the natural condition of the greater part of the tissues covered by an upper vulcanite denture is contact with fluids of varying degrees of temperature and so it does not appear unreasonable that these tissues, when relieved of a natural function, should suffer a partial loss of vitality. Irritation due to vulcanite dentures does not, however, seem to be very common. Rubber which has been correctly vulcanised is not porous to any considerable degree, but if incorrectly vulcanised becomes extremely porous. Such porous bases are undesirable, since they become extremely foul in the mouth and also afford lodgement for bacteria, the products of which are very strongly irritant to the soft tissues. Aluminium filings incorporated in thick pieces of rubber are found to ensure a uniform vulcanisation of the mass. The so-called "gold dust" rubbers consist of rubber impregnated with filings of aluminium. The particles of aluminium vulcanising become coated with a film of sulphide, which on polishing yields a bright metallic surface. Bases constructed from this rubber appear to have the same properties as those constructed from ordinary rubbers, except that they are more brittle. Rubber during vulcanising undergoes first expansion and then contraction, but the contraction is not sufficient in the majority of cases to interfere seriously with the fit of the finished denture. The contraction can be controlled by vulcanising the case between sheets of tinfoil, which by their pressure prevent the contraction of rubber away from the plaster model.

No doubt some of the "misfits" attributed to the contraction of the rubber during vulcanisation are really due to warping produced during polishing, and this unfortunate state of affairs is especially likely to occur during the polishing of a "saddle upper" type of denture. Recently a process has been invented for gilding vulcanite dentures, but this does not seem to have met with a great deal of enthusiasm. It is claimed that the gilding of the dentures relieves any soreness or ulceration that the tissues may suffer when in contact with vulcanite. I think the wearing properties of a vulcanite denture depend to a large extent, more so at any rate than with a metal denture, on the care with which it is treated by the patient. Providing that the patient keeps the denture in a clean state, its period of wear seems rather to be indefinite. The advantages and disadvantages of vulcanite for denture bases appear to be as follows :—

Advantages—

(1) It is easy of manipulation. It can be moulded into any form and becomes, upon proper vulcanisation, very strong, tough and elastic. It is repaired with equal ease.

(2) It is the lightest of all substances used in the mouth, its specific gravity being 1.5, whilst aluminium, the lightest of all metals used, has a specific gravity varying between 2.5–2.7.

(3) It is inexpensive both as to the cost of material and labour in construction.

(4) It can be easily contoured.

Disadvantages—

(1) It is a poor conductor of heat, causing absorption.

(2) It is somewhat porous, which may be greatly exaggerated by improper vulcanisation.

(3) Disadvantage of contraction can be controlled to a certain degree.

Although very satisfactory denture bases can be constructed from vulcanite the position of vulcanite, as what might be termed the universal denture base material, seems at the moment to be challenged by the resinous compounds which are being rapidly perfected. At the present moment, however, their state of perfection is not sufficiently advanced for it to be said that they are superior to vulcanite for denture bases. I am not sure of the order in which these compounds were offered to the profession, but I believe Dentolith was one of the first. Its use is confined to full upper and lower cases and only such cases as can be flasked in the "reverse method." A rough outline of the technique is as follows :—The case is waxed up and flasked in the reverse way, that is, the model is invested in the upper half of the flask, so that when the halves are separated the teeth remain in the lower half. The wax is boiled out and deep and spacious gates are cut to allow for the considerable contraction of the Dentolith. The flask and its contents are then thoroughly dried and, when it is hot and dry, the Dentolith powder is poured into the tooth-bearing half of the flask in considerable excess—about 1½ times as much as will be required. The flask is then heated to a temperature of 170° C., and maintained at this temperature for a quarter of an hour. At the end of this time the flask is removed to a press and gradually closed up, secured by means of pins and allowed to cool. When nearly cool it is immersed in water. The case is now ready for filing up and polishing. There is practically no difference in the time of working between dentolith and vulcanite, but the disadvantages attached to the use of this material appear to outweigh distinctly its advantages. Its advantages are as follows : The colour is æsthetically good, four shades of pink being available. It is strong and elastic, lighter than vulcanite and takes a high polish. Old cases can be filed up and re-used and no special apparatus is required. Fractured dentures can be easily repaired. For replacing a single tooth the dentolith is merely warmed locally and the tooth pressed into position. Complete fractures are repaired without the necessity for casting a model or in any way preparing the surfaces. They are merely painted with an organic solution of dentolith and held in position until the solution hardens, which takes about three minutes, the repair being quite invisible.

The disadvantages are that so much pressure is required during closing of the flask that the super-dried plaster model becomes cracked. Complete fracture of the model does not generally take place, but small fractures appear along the alveolar margin. In the mouth it slowly absorbs water, and at the end of a short period the denture assumes a finely tessellated appearance, with gradual disintegration and sometimes warping. An explanation of this behaviour is afforded by analysis, which shows dentolith to consist of a mixture of wood pulp and cellulose acetate. The cellulose acetate probably becomes converted into acetic acid in the mouth and consequent absorption of water by the wood pulp leads to swelling. It also undergoes considerable contraction and is very liable to splinter during filing up if the technique has not been correctly followed. Thus, dentolith can really only be regarded as an interesting step towards the perfection of these resinous compounds. I think the technique for the Oberlander process was very fully discussed some time last year at one of the Society's meetings, so I do not propose to mention it.

Another material recently produced by an investigator working at the Hospital is known as Walkerite. The technique for Walkerite is exactly the same as for vulcanite. After the case has been flasked the wax is washed out and the Walkerite packed in the usual manner. It is vulcanised in a mixture of water and methylated spirits. I have not been able to obtain much information as to the properties of Walkerite, since it has only just emerged from the experimental stage. Dentures constructed from this material are strong and elastic, although somewhat brittle. Æsthetically the colour is good. They can be readily filed up and are capable of a high polish. It can be used both for full and partial cases. Dentures which have become discoloured in the mouth can easily be cleaned in weak acid.

I now come to the second part of my first heading—the metals and alloys used for denture bases. A primary consideration is the fact that metals and alloys are crystalline in structure which, owing to interference during growth, lack the perfect geometrical forms associated with crystals. The changes which metals undergo during working take place in virtue of their crystal structure. During hammering, the crystal grains become broken up and the metal becomes hard and unworkable, but by careful annealing the crystal structure can be restored. An interesting fact observed by the investigators at the National Physical Laboratories was that the greatest elasticity is reached when the metal has been worked to a point nearest its breaking load. This property cannot, however, be taken advantage of in striking up metal plates, since tags have to be soldered on

afterwards for the attachment of vulcanite. During this process localised areas of the plate become annealed and consequently differ in crystal structure from the rest of the plate, so that the plate would become subject to unequal strain. Another interesting fact is that, during the cooling of a cast plate, points of equal heat can be plotted and a graph of the isothermic lines of cooling drawn. So that should the design of the plate be at all triangular or prolonged towards a point at any spot the isothermic line will be correspondingly prolonged in a convex manner and a weak area will exist along a line joining the summits of the convexities. Another physical property possessed by some of the metals which is of interest to the prothetist is the power of absorbing gases when in the molten condition, a part of which they retain in solidification. This accounts for the porous appearance under the microscope of cast gold and aluminium dentures. On this point we might condemn the use of Solbrig's press for casting dentures if we are inclined to believe that porous dentures are undesirable. The general method for using this press is first to melt the metal in a cavity prepared for its reception in the top of the investment with a blow pipe flame, during which operation it becomes thoroughly saturated with gas. It is then forced down a narrow sprue hole in the molten condition by steam pressure, which encourages super saturation of the metal, if this is possible. Obviously, we can reduce this porosity to some extent by melting the metal in a crucible under a layer of charcoal, but even then the plate will still be porous, due to the gas absorbed during the actual casting. The only way out of this difficulty would seem to be by casting dentures in a similar manner as is used in industrial casting. Of course, the whole point is whether the porosity of a cast plate is really a serious disadvantage or not and opinions on this point seem so divided that no definite view can be formed. Incidentally, the corrosion of cast plates has been attributed to their porosity.

With only one or two exceptions the metals used for denture bases are in the alloyed state, but the mechanical properties of some metals are adversely affected by unsuitably alloying. Very small quantities of lead alloyed with gold render the latter metal hard and brittle, so that great care should be taken to prevent gold used in the workshop from becoming contaminated with base metals. Care should also be taken to prevent zinc used for die casting from becoming contaminated with lead used for counters, as the dies cast from such contaminated zinc will not fulfil the required properties. To prevent contamination during the striking up of gold bases the metal should be covered with thin silk or tissue paper and annealed by heating on an asbestos pad, accompanied by frequent pickling.

The metals used in the unalloyed state are aluminium and tin. Tin was quite extensively used a few years ago for lower bases. The bases were cast in a thick state and, in consequence of their weight, were used as a method for retaining the dentures in position in the mouth. This practice has, however, been abandoned in favour of a more scientific method of retention, namely, the correct adaptation of the plate to the oral tissues, and tin for a denture base has fallen out of use. Lately aluminium has come into prominence. Two difficulties were encountered when the use of this metal for bases was first attempted, but which have been successfully overcome. The difficulties were :—

(1) The metal was acted upon by the alkalies present in the oral fluid and rapidly became corroded.

(2) No suitable alloy could be found for soldering tags to the base for the attachment of vulcanite.

It has been proved that the first difficulty was due to the aluminium being used in an impure state. Contamination might have occurred during the production of the metal or during its manipulation in the laboratory. By the introduction of the electrical process aluminium can be obtained in a chemically pure state and as such is resistant to the action of the oral fluids and, by casting the bases instead of swaging, both the difficulty of soldering and the chance of contamination in the laboratory are overcome, providing reasonable care is taken of the metal during melting in preparation for casting.

The aluminium should be melted in a crucible under a layer of charcoal in order to prevent oxidation. Absorption by the molten metal of the oxide which is formed—unless this precaution is taken—has a detrimental effect on its working properties. The metal casts quite readily under a pressure of about 20 lbs. to the square inch. It undergoes a certain amount of distortion during casting, due to the contraction of the metal, but this can be overcome by swaging the base after it has been cast on the original model, which has been cast in a mixture of Portland cement and plaster of Paris, or by judicious bending on a bench peg. The properties of the metal render it very suitable as a base for artificial dentures. Although not as light as vulcanite, it is the lightest of all metals or alloys used in dental practice. The question of the use of a light base depends on the power of retention of the tissues ; and the considerations in the choice of a material for an upper denture base might be summed up as the relative weights of the materials available to the retentive

powers of the tissue. It is also strong, malleable and ductile, capable of a high polish and entirely resistant to the action of the fluids present in the mouth. It is also of a high specific heat. It therefore fulfils nearly all the requirements for an ideal denture base, but its disadvantages are that it has to be used in rather a thick state and can only be used for full upper dentures and it is also more porous than cast gold bases. Aluminium forms a series of alloys with copper which are known as aluminium bronzes and which are quite extensively used on the Continent for denture bases.

These alloys are strong, malleable and ductile, although they become somewhat discoloured in the mouth owing to the presence of the copper. They can be used both for full and partial cases, since soldering can be accomplished with a high carat gold solder. They are of a high specific heat and capable of a high polish. Their use does not, however, seem to have been attempted in this country, no doubt because of the discolouration they undergo in the mouth.

The predominating metal in the alloys used for denture bases at the present time is gold. The gold is alloyed with varying quantities of silver, copper and sometimes zinc in order to harden it. The actual composition of the alloy varies according to the company from which it is purchased and is described in terms of carat fineness, a 16 carat alloy containing 8 parts by weight of base metals in 24 parts of the alloy. The alloys can also be obtained in different thicknesses, and the thicker the metal the more difficult it is to work. Gold bases are generally constructed from an 18 or 20 carat alloy. Such alloys are malleable, ductile and resistant to the action of the saliva. They are capable of a high polish, but they do not possess a very high specific heat. Soldering is accomplished by using an alloy of a lower carat, which has a lower melting point. Gold alloys can be used for both striking and casting bases. This necessarily introduces the relative merits of a cast and struck plate, around which a great deal of controversy has always existed. The opinion of some authorities seems to be illustrated by Wilson, who says: "The casting method for gold bases has but one feature in which it is superior to swaged base—that is, adaptation. In all other factors—excepting purity of the metal—it is inferior to the swaging method. It is less dense, less rigid, less elastic, and more bulky for the required strength." That a better fit can be obtained by casting dentures seems a pretty certain fact and it is also a definite fact that cast bases are porous. Although cast bases are less rigid than struck bases, the former appear to be sufficiently strong to withstand the forces to which they are subject in the mouth. So that although cast bases generally appear to be considered inferior to struck, their inferiority seems to be rather overrated in the opinion of some authorities. Dental alloy was formerly used for denture bases but, owing to its high cost, it has been replaced by the gold alloys. This metal is an alloy of platinum and silver. It is malleable, ductile and tenacious and its high melting point allows the use of a high carat gold solder. It is, however, harsher than gold in working and is apt to tarnish under certain oral conditions. It is useful as a backing for porcelain teeth and for crown posts. Since it is not readily attacked by mercury it may be employed in the construction of retention posts in large amalgam fillings. From the above it will be seen that no material, either metallic or non-metallic, entirely fulfils the properties of an ideal denture base, although aluminium comes very near to doing so for full upper cases and also that any of the materials in contact with the oral tissue will cause either a physical or bacterial irritation, or both. Since artificial dentures, however, are the only means for returning the natural function to edentulous jaws, we must attempt to minimise these disadvantages by choosing our material with the utmost discretion.

I now come to the second part of my paper—materials for continuous gum work. Wilson says: "By this term is meant a base plate of platinum, the outer surface of which is covered with a continuous layer of porcelain. It is true the term might well or better be applied to vulcanite or celluloid, but the term was applied to the enamelled platinum before the introduction of the other materials and is universally accepted as applicable to the enamelled platinum only. Therefore, to call any other material by this name is a manifest deception."

I see no reason why this term should not be applied to other materials used for the same purpose, especially as the enamelled platinum technique has become obsolete, and I have dealt with them under this heading.

The problem of reproducing natural gum colouring in artificial dentures is one which has been before the dental profession and the dental industry constantly for many years. Until recently the only alternative to pink rubber was gum sections, but by the introduction of a new material, which I am about to describe, the difficulty seems at last to be solved. Contours can be readily produced with pink rubber, but its æsthetic appearance might even be termed repulsive and, although gum sections have a good æsthetic appearance, mechanical considerations do not allow of their use in all

cases. Several materials have been introduced recently for continuous gum work, among them Oberlander and Exerlane, but the latest production term, Gencivex, offered by the Amalgamated Dental Company, seems to possess certain more advantageous properties, and I intend to devote this part of my paper to a short description of its method of use.

No special apparatus is required for Gencivex technique. It can be used over any shade of vulcanite, except maroon, without detriment to its natural gum pink appearance and without increasing the depth or thickness of the facing. The gum portion of the denture, which is to be coated with Gencivex, can be either made the required thickness during the waxing up stage or the excess can be removed after the denture has been vulcanised to allow for the depth of Gencivex. This surface is first roughened with a file and then painted with a solution of Gencivex painting-out solution, which neutralises the colouring of the vulcanite, even when a dark coloured base rubber is used, and also has the effect of eliminating any danger of air bubbles. It is important when painting to apply the brush in one direction only and to get well up between the teeth and thoroughly cover the vulcanite, otherwise the colour of the material is seriously affected. Having so prepared the gum portion of the denture, the Gencivex is softened by warming in a flame and the surface which is to be applied to the vulcanite damped with alcohol, which has the effect of making it tacky. The Gencivex is then moulded on to the denture to the required form and contoured around the necks of the teeth with a pointed instrument. Any small irregularities such as finger prints can be quickly smoothed out by gently warming again over a flame. The gum region of the denture is then coated with a special plastic protecting material to prevent contact with steam or plaster during vulcanising. The case is then flasked and placed in a vulcaniser containing water. The vulcaniser is then closed, but the steam tap is left open until steam begins to issue, when it is then closed. The cooking time is 90 minutes at a pressure of 50 lbs. Any slight variation of this time and pressure will not, however, be accompanied by detrimental results in the finished facing. After removal from the vulcaniser the case is cut out carefully and finished with a medium file, scraped or sandpapered as may be required, but very little finishing is needed if the moulding of the material in the plastic state has been carefully done. The final polish is obtained with pumice and whitening in the ordinary way. Gencivex is supplied in two shades, light and medium, to facilitate the matching up of the natural gum in cases of partial dentures. In the case of fracture of the facing only it is not necessary to strip the whole facing, but a small portion is cut away in the region of the fracture and the repair is effected with the ordinary Gencivex. In the case of complete fracture a special material is supplied and, by using rapid vulcanising rubber, the repair of the vulcanite base and the gum facing can be effected at the same time. Gencivex has an excellent æsthetic appearance and, providing it is not exposed to strong light over a long period, remains constant. It is strong and is also said to be durable and repeated vulcanising does not have any effect on its colour. Its only disadvantage would appear to be the extra time needed to complete the denture. In conclusion, I must apologise if my paper has appeared somewhat disconnected and for the fact that I have not been able to exhaust, during the short time at my disposal, every point upon which I have touched.

Papers by Guy's Men.

Alan H. Todd, M.S., F.R.C.S. The Possibilities of Operation in Infantile Paralysis, *Lancet*, 1927, i, 864.

—— (1) Chronic Painless Synovitis of Knee, associated with Bazin's Disease; (2) Deformity and Dislocation of Hip Joint from Acute Epiphysitis of Infancy, *Proc. Roy. Soc. Med.*, xx, 1927, 892, 893; *Sec. Orthop.*, 38, 39.

George F. Stebbing, M.B., B.S. Treatment of Varicose Ulcer, *Lancet*, 1927, i, 887.

Philip Turner, M.S. Parotid Cyst, *Proc. Roy. Soc. Med.*, xx, 1927, 771; *Clinical Sec.*, 39.

—— "Seasonal" Enlargements of the Parotid (Two Cases), *Ibid.*, 771; *Ibid.*, 39.

C. Worster Drought, M.D., and B. W. C. Archer, M.B. Ateleiosis (Lorain's Disease), *Ibid.*, 771; *Ibid.*, 39.

E. C. Hughes, O.B.E., M.Ch. Necrosis of the Skull, *Ibid.*, 775; *Ibid.*, 43.

L. R. Broster, F.R.C.S. Case of Scoliosis for Diagnosis, *Ibid.*, 777; *Ibid.*, 45.

R. R. Macintosh, L.R.C.P., M.R.C.S. Tuberculous Epididymitis with Mental Papillomata, *Ibid.*, 777; *Ibid.*, 45.

O. Gayer Morgan, M.Ch., F.R.C.S. A Case of Angeioid Streaks of the Retina, *Ibid.*, 881; *Sec. Ophthalmology*, 41.

R. D. Gillespie, M.B., and T. A. Ross, M.D. Progression and Regression in Two Homosexuals, *Ibid.*, 903; *Sec. Psychiatry*, 9.

R. N. Craig, M.D. Blood Sugar Curves in Certain Mental Disorders, *Lancet*, 1927, i, 925.

L. Forman, M.D., M.R.C.P. Late Results of Chronic Gastric Ulcer treated Medically, *Brit. Med. Jour.*, 1927, i, 796.

Notice.

A Dance arranged by members of the Hospital, in aid of the Hospital, will take place at Australia House, Strand, W.C. 2., on Friday, 20th May, at 8 p.m.

Double tickets inclusive 8/6 each.

Mr. R. YEWIN-PAIN (?)

"If so, come to me."

GUY'S HOSPITAL MEDICAL SCHOOL.

TIME TABLE. SUMMER TERM, 1927.

SUBJECTS FOR FINAL EXAMINATION. MEDICAL.

Subject	Lecturer	Days and Times	Place	First Class or Lecture
Bacteriology	Professor Eyre	Lectures. Tues. Weds. and Thursdays at 12.15 p.m. Practical. Mons. Tues. Weds. Thurs. Fridays and Saturdays at 9.15 a.m.	Pathological Th'tre Path'cal Class Room	Wednesday, April 20 Wednesday, April 20
Psychological Medicine	Dr. Gillespie	Lectures. Weds., at 9.30 a.m. Demns'tions. Fri. at 3.15 p.m.	Physio'cal Theatre Bexley Men'l Hosp.	Wednesday, April 27 Friday, April 29
Forensic Medicine	Dr. Ryffel	Thursdays at 4.30 p.m.	Class Room 3	Thursday, May 5
Operative Surgery	Mr. Hughes.	To be arranged	Op. Surg. Class Rm.	To be announced later
Revision Medicine Midwifery Surgery	Classes Dr. Conybeare Mr. Chapple Mr. Ogilvie	Times to be arranged—see separate Notices.		

ORGANIC CHEMISTRY, ANATOMY, PHYSIOLOGY AND PHARMACOLOGY.

Subject	Days and Times	Place	First Class or Lecture
Organic Chemistry (2nd M.B. Part I.)	Lectures. Weds. & Fridays 9.30 a.m. Practical. Tues. & Thurs. 10 a.m.	Chemistry Theatre Chemistry Laboratory	Wednesday, April 27 Thursday, April 28
Anatomy	Elementary Lectures. Mons. 9.30 a.m. Weds. 11 a.m. Practical Anatomy. Daily from 9.30 a.m. to 5 p.m. Revision Classes. To be announced later Normal Histology. Tues. & Thurs. at 2 p.m.	Anatomical Theatre Dissecting Room Demonstration Theatre Histology Laboratory	Wednesday, April 27 Tuesday, April 26 To be announced later Tuesday, May 3
Physiology	Chemical Physiology. Fri. 11-1 p.m. Experimental Phys'logy. Weds. 11-1 p.m. (Revision for M.B. Candidates.) Physiological Histology. Mons. 11-1 p.m. Clinical Physiology (All Students). Thurs 12-1 p.m. Practical Revision Classes for candidates for Conjoint Examination, to be arranged.	Chemical Physiological Laboratory Experimental Physiological Laboratory Experimental Physiological Laboratory Clinical Theatre	To be announced later Thursday, May 5 To be announced later
	Tutorial Classes, Elementary. (Junior Medical Students.) Advanced. (All Senior Medical Students.)	To be arranged at a General Meeting of Medical Students attending courses in Physiology, to be held in the Physiological Theatre on Monday, May 2nd, at 10.30 a.m.	
Pharmacology	Mons. 4 p.m. Fridays, 1.15 p.m.	Physiological Theatre	Friday, April 29

CHEMISTRY, PHYSICS AND BIOLOGY.

Course	Subject	Lectures	Place	Practical Classes	Place
Pre-Medical Conjoint	Inorganic Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Thurs., April 28th.	Chemistry Theatre	Tues. & Thurs. 3–5 p.m. First Class, Thurs. April 28th at 2 p.m. Subsequent classes will commence at 3 p.m,	Chemistry Laboratory
	Organic Chemistry	Tues. & Thurs. 2 p.m. First Lecture, Tues. May 3rd	Chemistry Theatre		
	Physics	Light & Sound. Tues. & Thurs. at 10.50 a.m. Heat. Tues. at 12 noon. First Lecture, Thurs., April 28th.	Class Room IV.	Mons. 10–1 p.m. and 2–5 p.m. First Class, Mon. May 2nd.	Physics Laboratory
Conjoint	Biology	Weds. & Fridays, 9.30 a.m. First Lecture, Wed., April 27th.	Anatomical Theatre	Mons. & Fridays 2.30 p.m. First Class, Fri. April 29th.	Biology Laboratory
M.B. London	Inorganic Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Thurs., April 28th.	Chemistry Theatre	Mons. 10-1 p.m., Tues. 2-5 p.m. First Class, Mon., May 2nd.	Chemistry Laboratory
	Physics	Light & Sound. Tues. & Thurs. at 10.50 a.m. Heat. Tues. at 12 noon. First Lecture, Thurs. April 28th.	Class Room IV.	Thurs. & Fridays 2–5 p.m. First Class, Thurs. April 28th.	Physics Laboratory
	Biology	Weds. & Fridays, at 9.30 a.m. Thurs. at 12 noon. First Lecture, Wed., April 27th.	Anatomical Theatre	Weds. & Fridays at 10.30 a.m. Sats. 11 a.m. First Class, Wed. April 27th.	Biology Laboratory

The Surgery of the Lung.

By Mr. GRAHAM CAMPBELL. Awarded the Treasurer's Prize, and read before the Guy's Hospital Physical Society on Thursday, April 14th, 1927.

MR. PRESIDENT AND GENTLEMEN,—Before considering the actual surgery of the lungs, it will be well to consider briefly the similarities and differences of the two great cavities of the body—the thorax and the abdomen. Developmentally, these two cavities are similar and were, to begin with, continuous. It was by the extension across, from one side to the other of the diaphragm, that the two cavities were separated. This septum may be incomplete owing to congenital deficiency and so will enable the lung to expand itself through the abdomen, thus producing a hernia or pneumocele.

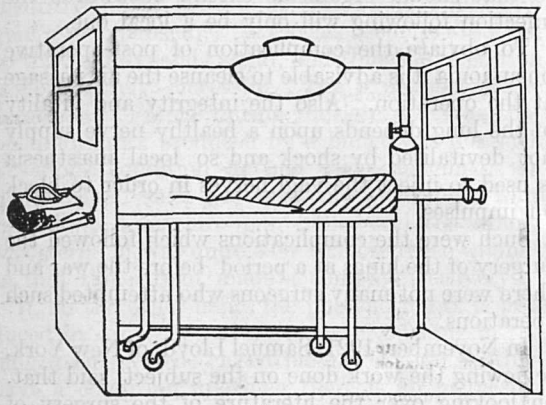


Fig. 1.
Sauerbruch's Cabinet showing position of patient.

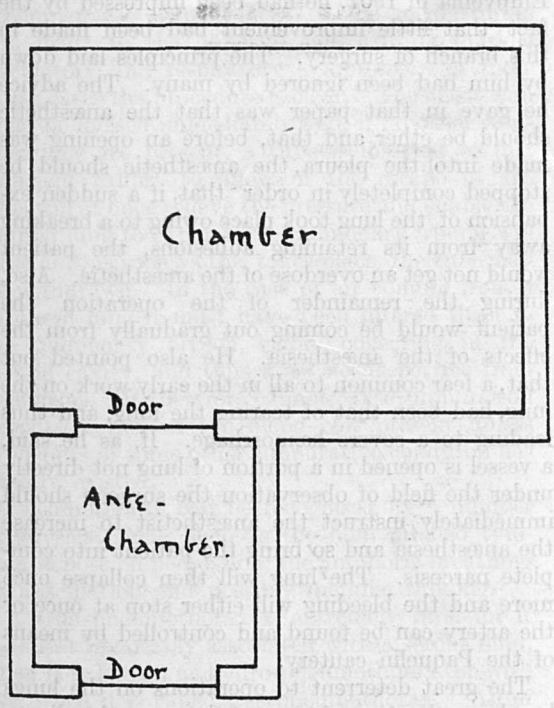


Fig. 2.
Sauerbruch's Cabinet showing scheme of rooms.

There are, however, certain local differences in the thoracic region that are not found in the abdominal cavity and which must first require consideration. They are :—

(i) The rigidity of the thoracic wall due to the ribs.

(ii) The negative pressure in the thoracic cavity.

(iii) The lung contains a large amount of elastic tissue and, under atmospheric pressure, collapses.

(iv) The rigidity of the wall, which is our great help in diagnosis and localisation of sepsis in the abdominal cavity, is to a large extent absent from the thoracic cavity.

The first point has now been successfully overcome, and rib resection is quite common and easily accomplished. The second difficulty was tackled by Sauerbruch and Bauer. Sauerbruch, experimenting on animals with his differential chamber of negative pressure, found that an entire lobe of a lung could be ablated without causing death and even an entire lung could be removed without a very high mortality, the animals rarely dying as an immediate result of the operation but a short time later. This he considered to be due to reflex vagus stimulation. His apparatus consisted of an air-tight chamber which was fitted with two doors, separated by an air-lock, a system of ventilation and a pump which kept the air at a negative pressure of about 8 mm. of mercury. The surgeon and his assistant work inside the chamber and can communicate with the anæsthetist, who is outside, by means of a telephone. The patient's head projects through an air-tight opening in the wall of the room and thus breathes air at atmospheric pressure so that, since the lung is subject to negative pressure, the operation can be carried out under almost physiological conditions. The abdomen and the lower extremities of the patient are enclosed in a bag which communicates with the atmosphere outside the room, so that the negative pressure is unable to affect the veins of those parts.

Bauer, by his method of positive pressure, required much less special apparatus, but only one

or two surgeons on the Continent and in America attempted operations on the lungs at that time. The best method of maintaining the physiological condition for the lungs during operation was by means of the hyper-atmospheric apparatus introduced by Meltzer and Auer. This consisted in giving the anæsthetic under pressure, and is known as intratracheal insufflation. It is introduced through a catheter passed through the glottis to just above the bifurcation of the trachea.

During the Great War a large number of cases needing surgical treatment came under observation and conservative treatment with a high mortality was all that was available.

In 1916 the French surgeons started to operate on the chest in general without any special apparatus at all. In certain cases sudden death resulted, which Warren thought was due to the upset of balance in the thorax, the sound lung pulling the heart over to the non-collapsed side by negative pressure in its half of the thorax. This caused what he termed a "mediastinal flutter" with marked dyspnœa, collapse and depression which had a fatal termination unless treated immediately. This only happened in cases where the pleura was at all areas non-adherent.

To obviate the "flutter" he advised the following points :—

(i) Steady the collapsing lung with forceps and if any untoward signs occur gentle traction on the lung will allow the mediastinum to recover.

(ii) Operate with the sound side uppermost, so that gravity will act against this suction to the sound side of the mediastinum and heart.

(iii) Steady, by means of gauze-pads, the root of the collapsing lung.

Even with these adjustments in technique, surgical intervention seemed to be of little avail and so it was that W. Meyer gave the following principles to rule out the dangers of thoracic work :—

(i) Avoid acute pneumothorax.

(ii) Avoid acute post-operative pneumothorax.

(iii) Avoid post-operative pneumonia.

The acute collapsing of a lung at operation occurred frequently during the late war, whilst if double collapse occurred then certain death followed. It is thus obvious that these risks are not justifiable and some sort of positive pressure apparatus is required.

Parry, of Chicago, advised the use of the gas and oxygen re-breathing method of anæsthesia, in which he found the lung seldom collapsed. The other method, more commonly used, is the intratracheal anæsthesis. Mayer pointed out that by altering the pressure used in the intratracheal apparatus he could empty and fill the lung, this acting as a stimulus to the heart's action. He called this "lung gymnastics" and advised that it should be performed frequently during the operation.

The result of manipulation, together with the response of the pleura to exposure, is the rapid effusion of fluid into the pleural cavity. This exudate is sterile only in a few cases and it is well to have an air-tight thoracic drainage by valved-drain, flange or rubber drain covering. It is required that this be absolute for at least three days in order that adhesions may be allowed to form, so that should organisms extend backwards the infection following will only be a local one.

To obviate the complication of post-operative pneumonia it is advisable to cleanse the air passage at the operation. Also the integrity and vitality of the lung depends upon a healthy nerve supply not devitalised by shock and so local anæsthesia is used to inject the vagi nerves in order to block off impulses.

Such were the complications which followed the surgery of the lungs at a period before the war and there were not many surgeons who attempted such operations.

In November, 1921, Samuel Lloyd, of New York, reviewing the work done on the subject, said that, on looking over the literature of the surgery of the lung since the publication of his first paper on Empyema in 1907, he had been impressed by the fact that little improvement had been made in this branch of surgery. The principles laid down by him had been ignored by many. The advice he gave in that paper was that the anæsthetic should be ether and that, before an opening was made into the pleura, the anæsthetic should be stopped completely in order that, if a sudden expansion of the lung took place owing to a breaking away from its retaining adhesions, the patient would not get an overdose of the anæsthetic. Also, during the remainder of the operation the patient would be coming out gradually from the effects of the anæsthesia. He also pointed out that, a fear common to all in the early work on the lung, had been that of tearing the lung, and thus leading to a severe hæmorrhage. If, as he said, a vessel is opened in a portion of lung not directly under the field of observation the surgeon should immediately instruct the anæsthetist to increase the anæsthesia and so bring the patient into complete narcosis. The lung will then collapse once more and the bleeding will either stop at once or the artery can be found and controlled by means of the Paquelin cautery.

The great deterrent to operations on the lungs has been the fear of pneumothorax and collapse of the lung. To this must also be added that of mediastinal flutter.

It was this fear that introduced the positive and negative pressure apparatus, to enable the operator to maintain the lung in expansion during the progress of the operation. With regard to the dread of pneumothorax, it would be advisable to consider how dangerous it is.

Artificial pneumothorax has now been practised for many years with the object of collapsing the lung in order to keep it either temporarily or permanently out of working order. The results of this operation have not been absolutely satisfactory since it does not set up an inflammatory pleuritis and so cause adhesions which would prevent a re-expansion. As the gas becomes absorbed so the lung expands again, and thus the operation is not entirely successful. The experience of the surgeons in France during the late war was that pneumothorax produced by a bullet was not such a serious condition as had been imagined. In many cases, such as when the symptoms were caused by a machine gun bullet and the wound was sterile, it was quite easy to close these wounds so that the patient made a complete recovery.

If, on the other hand, the pneumothorax is produced by an escape of air from an opening in the lung itself into the closed pleural cavity, we then have a condition in which there is an increasing pressure of air in a closed space. The air collecting in the pleural cavity compresses the lung, the accompanying displacement of the mediastinum and heart to the opposite side causing marked circulatory and respiratory symptoms. In these latter cases the procedure is clear. The chest wall must be incised immediately and, if no other complications are present, a tube is inserted of just sufficient calibre to allow of the escape of air. This will at once relieve the pressure and enable the injured lung to expand, the pulmonary wound will close and, as soon as this takes place, the tube may be withdrawn. In the case of air coming from a ruptured lung it must have been filtered through the pulmonary alveoli, before collecting in the pleural cavity, and thus must needs be free from organisms. It therefore cannot cause suppuration or putrefaction of the blood clot present unless bronchitis or some other suppurative condition has already existed.

Pneumothorax can be recognised by a number of physical signs, such as the high pitched tympanitic note on percussion, the amphoric breathing on ausculation and possibly metallic tinkling.

A true pneumothorax is extremely rare, for it is almost invariably associated with a serous fluid, when it is known as hydro-pneumothorax, or with pus, when it is called pyo-pneumothorax. All of these conditions will be considered later on, when other similar disorders will be discussed.

The subject of mediastinal flutter must now be considered in full and, since this was recognised by Murphy, it would be fitting to make a lengthy quotation from his works. He says :—

" The most pronounced and dangerous manifestation observed in my experiments was when a medium sized opening (2 inches) was made in an intercostal space and the air allowed to pass in and out with some opposition. The lung on the open side gradually contracted down to the hilum ; the mediastinal septum and contents flapped to and fro in respiration, like a sail during a lull ; when the dog inhaled the mediastinal septum concaved greatly to the uninjured side ; when he exhaled, it convexed to the opposite side. The chest ceased to be a cylinder for the piston—the diaphragm in the respiratory act. The mediastinal septum became a second diaphragm which contracted and destroyed the respirating or piston power of true diaphragm. With this motion of the septum there was comparatively no exchange of air in the lung, there was merely a variation in the shape of the lungs ; the septum soon became emphysematous and ruptured. The dog in this experiment had rapid panting respirations which shortly ceased. The respiration could be easily restored by placing the hand over the opening in the chest wall with the diaphragm either concave or convex. By keeping the hand in position for a few minutes the cyanosis would disappear and the animal reacted to his normal condition, proving that it was not the displacement of the mediastinal organs to the right or left, not the diminution in the respiratory area, but the absence of secure pressure which forced the air out of the lung on the healthy side in respiration and aspirated it in inspiration.

" I am convinced that the dyspnœa following opening of the pleural cavity is due to the vibration of the mediastinal septum and contents, destroying the piston action of the diaphragm. In support of this theory I wish to call the attention to the methods of relief reported by different operators in cases of dyspnœa following opening of the pleura in surgical operations on the lung or pleura. The operators closed the opening regardless of the condition of the lung, as far as contraction and expansion were concerned ; still, the patients were relieved. Delageniere filled a pleural cavity with water to prevent dyspnœa after he had resected the rib and removed a very large quantity of pus from the cavity. It can be seen from this case that the respiratory area was not increased, the quantity of blood in or out of the lung was not changed, the pneumogastric filaments were not interfered with, but the chest cylinder was rendered complete by the immobilisation of the

mediastinal septum. Covering the opening in the chest by gutta percha to prevent the intake and egress of air would have accomplished the same result. When a drainage tube has been inserted into the pleura and dyspnœa occurs, the occlusion of the tube relieves it. I found, that by placing a forceps on the collapsing lung and drawing it into the opening, the dyspnœa was immediately relieved and respiratory movements were at once resumed. Forceps placed on the hilum of the lung, immobilising the septum, had the same effect.

" I also noted that if the lobe were secured in the aperture and only partially filled it, it did not take part in the respiration. But the dog was relieved, due, I believe, to the steadying of the mediastinal septum. The plugging of the trap-door orifice with the lobe, or suturing it to the margin, was the best method for the relief of the dyspnœa. Carl Bayer, when operating in a case, drew up the collapsing lung and sutured it to the margin of the wound ; the symptoms of dyspnœa and collapse disappeared and this portion of the lung filled and emptied in respiration."

On account of bronchiectasis and phthisis having so many similarities and in many cases their cure depending on the same factors, it is well to consider these two conditions together. They both occur at a comparatively early age in life, each having a high mortality, the mortality of phthisis being about 80 per cent. while the opinion of Powell and Hartley is that " bronchiectasis, owing to its anatomical character, is not a disease from which we may expect recovery. At the best, all that we may hope for is that, by preventing decomposition of the sputum, we may be able to arrest its further progress. In nearly all cases, in spite of treatment, the disease gradually advances."

Bronchiectasis is an affection generally found in early and middle adult life, in males more frequently than in females and rarely occurring congenitally. It is a chronic affection of the bronchi and bronchioles, resulting in their dilatation, thickening and rigidity. When it is associated with putrid bronchitis it may give rise to a condition resembling closely abscess or gangrene of the lung. Two forms of dilatation of the bronchi are known, the one being the Fusiform dilatations, which usually occur bilaterally and are present in cases of chronic bronchitis, the other is the Saccular variety. This latter variety, being generally unilateral and occurring singly, is the one which gives rise to surgical indications. Symptoms of the saccular dilatation are presence of a chronic cough, coming on in paroxyms and associated with profuse expectoration of an exceedingly foul smelling pus. Health is gradually impaired by septic absorption and loss of appetite, due to the putrid character of the pus. When a saccular dilatation occurs the secretions are retained and often become infected with putrefactive organisms. When the cavity becomes filled with this secretion a small amount escapes with the more sensitive neighbouring bronchi and so provoke a paroxysm of coughing. These fits of coughing occur generally in the mornings, just after rising, and the patient finds great relief in lying on his abdomen with his face overhanging the side of the bed just prior to arising. In this way he is able to empty the cavities of the pus that has remained there during his sleeping hours.

It may develop either during the course of a pre-existing disease or at a future date following the subsidence of the original lesion and so can be looked upon as a complication or a sequela.

Thus bronchiectasis occurs :—

I. As a Complication of—

(i) Atelectasis of the lung—" congenital bronchiectasis."

(ii) Any chronic affection of the lung, such as phthisis or chronic abscess.

(iii) Pressure on a bronchus from without as a result of aneurysm, enlargement of lymphatic glands, chronic insterstitial mediastinitis or foreign body such as a shell fragment or bullet.

(iv) Chronic obstruction of the lumen of a bronchus by intrabronchial neoplasm.

II. As a Sequel to—

(i) An acute infection of the lung, such as pneumonia, which fails to undergo complete resolution.

(ii) An acute infection of the lung, such as occurs as a result of gunshot wounds.

(iii) Acute irritation of a bronchus, such as is produced by exposure to shell gas.

(iv) Acute obstruction of a bronchus by a foreign body.

Phthisis is an affection due to the bacillus tuberculosis, which causes nodular growths, tubercles and diffuse infiltrations, which, later, either undergo caseation, necrosis and ulceration or heal with sclerosis and calcification. In most cases the primary infection takes place in the lymphatic structures, from which the lungs are secondarily infected. It affects all the tissues in the body and in this country is estimated as the direct result of one-eighth of all deaths. The pulmonary form need only be considered in this instance. In children the affection follows measles or whooping cough and in adults the patient may have noticed a cough for some considerable time. The cough is later pronounced and a mucopurulent occasionally rusty sputum is expectorated in large quantities. The physical signs that are

present are those of bronchitis in children, a defective resonance being present at the bases from scattered areas of broncho-pneumonia. The rales heard in the chest are either sibilant and sonorous or small, fine and crepitant. The temperature is generally raised and the pulse is rapid and feeble. The sputum when examined may be found to contain tubercle bacilli.

Direct surgical interference on the lung in cases of phthisis is to be condemned, owing to its high mortality. Since Bligney reported a case in 1670 of the cure of a tuberculous cavity by an accidental sword thrust in a duel, surgeons have attempted to relieve patients suffering from tuberculous cavities by applying this method. The results have shown that the number finally cured was extremely small.

Tuffier, Lowson and Ferguson then reported successful cases of pneumectomies, but here again the mortality is so high that it varies but little from that of incipient tuberculosis when treated by modern non-surgical methods.

In bronchiectasis, however, direct surgical work on the lung is of considerable value, whilst both conditions benefit from those operations which are devised to set the lung at rest, bringing the walls of cavities into apposition and so aiding repair. This can be accomplished in a number of ways, the simplest of which is probably that of phrenicotomy. The division of the phrenic nerve will paralyse the diaphragm of the corresponding side, and will thus cause diminution of the hemithorax, collapsing any cavities that should happen to be present in the base of that lung. This procedure will only occur in about 60 per cent. of cases, however, because in the remainder accessory fibres join the main phrenic nerve after its entrance into the thorax. The original operation has been modified somewhat in order to overcome this anatomical variation.

The modified operation, called a radical phrenicotomy or exairesis, is performed quite readily under local anæsthesia by cutting down in a line parallel with the posterior border of the sterno-mastoid muscle in its lower half. The facia of this muscle is incised and the muscle itself drawn forwards, leaving the phrenic nerve exposed as it lies on the scalenus anterior muscle. The nerve, after having been anæsthetised, is divided and the proximal end of the distal portion is secured in an artery forceps. The nerve is then slowly twisted around the forceps and is thus gradually withdrawn from the thorax. This procedure is only accomplished in a few cases, whilst in others it may require division after a sufficient portion has been removed from its original path. During the performance of this operation a dragging pain is commonly felt in the chest, while spasmodic movements of the diaphragm may also occur. The only complication that is at all common is hæmorrhage, from which only one death has occurred in several hundreds of cases recorded. Felix states that the average height that the diaphragm is raised is 7 cm. at the end of inspiration and 3 cm. at the end of expiration, whilst it is said that the volume of the lung so treated is reduced by 400 c.cm.–800 c.cm.

Indications for this method of treatment in phthisis is when the disease is subacute and the patient too ill for any major operation, or when the disease in the better lung appears too extensive to be dealt with by artificial pneumothorax treatment. Hæmoptysis from basal cavities can also be controlled sometimes by this method. A. T. Edwards, of the Brompton Hospital, states that he has performed this operation in 47 cases. In the first 17, 5 were supplementary to thoracoplasty and 3 to pneumothorax treatment. In 8 of the cases only a simple division of the nerve was carried out, and in those cases in which no other operation was done the result was disappointing. In the last 9 cases radical phrenicotomy was performed with satisfactory improvement.

When numerous localised adhesions are present between the parietal and visceral pleuræ, pneumothorax treatment can only be partially successful owing to their preventing complete collapse of the lung. In such cases division of these adhesions is useful, provided that the bands be comparatively narrow. They are generally found overlying cavities in the lung and have grave results, as shown by Sangman and Gravisen. In 211 pneumothorax cases the proportion of patients able to work, after 3 to 13 years, was only one-half as many in those with adhesions as compared with those free from adhesions.

Open thoracotomy with ligature and division of the adhesions has been performed, but the results have been bad, since it started a widespread infection of the pleura or, eventually, intractable fistulæ formed. Owing to these complications it has been abandoned for the use of cauterisation of the adhesions under the control of thorascopic vision as devised by Jacobaeus of Stockholm.

The operation takes place under local anæsthesia and consists of a suitable intercostal space being selected, through which a fine trocar and cannula are passed. The trocar is replaced by a telescope, together with its terminal light. As soon as the pleural cavity has been reached the adhesions are viewed with relation to their ultimate division. On considering this to be possible a finer trocar and cannula is introduced in such a manner that the cautery will be enabled to work at right angles

to the adhesions. Before the introduction of the cautery it is well to regulate the current so as to produce a strong red glow and the best method has been found to be a switch controlled by the foot. On dividing the adhesions the ends retract, and these should be examined for any bleeding points which, if present, can be retouched. A common sequel of little import is a slight degree of surgical emphysema, but the main complication has been severe emphysema, which has caused death in about 7–8 per cent. of cases. Before performing this operation on a patient the amount and character of the sputum, the temperature and pulse must all be considered. It should not be attempted in the presence of pleurisy, nor when the adhesions are thicker than 1 centimetre.

Mention having been made of the production of an artificial pneumothorax, when dealing with the early work on the lung, it is convenient now to describe this operation before dealing with the treatment of bronchiectasis and the operation known as thoracoplasty.

Artificial pneumothorax treatment is of variable importance, maintaining the lung in a collapsed state so long as the gas remains, on the expiration of which a refill has to be performed. This method of lung collapse is particularly valuable when there is :—

(i) Cavity formation.

(ii) Secondary infection.

(iii) Repeated or long-continued hæmoptysis.

(iv) Progress of the disease despite medical treatment.

(v) Associated laryngeal tuberculosis.

It is also of great value as a means of :—

(i) Definitely prolonging the life of a young adult.

(ii) Enabling a mother to return to her children with less risk of infecting them.

(iii) Enabling the working man to return to work or to an unsuitable environment.

There are many contra-indications which enable us to tell which cases should not be treated thus, and the following are points which must be considered as such :—

(i) The absence of sufficient healthy lung tissue in the opposite side to carry on the functions of respiration.

(ii) The presence of cavities or of retention of secretions in the opposite lung.

(iii) The presence of albumen or sugar in the urine or of abdominal tuberculosis.

(iv) Excessive intestinal stasis.

(v) Extreme nervousness of the patient.

The operation itself is comparatively simple. An area in the chest wall is selected where the presence of breath sounds and normal resonance give promise of the absence of pleural adhesions. It has been found that should the lesion be situated at the apex a point below the fourth interspace and posterior to the mid-axillary line is the best situation. If the seat of the lesion is a middle or a lower lobe then the most successful position is the third interspace in the anterior axillary line. Having selected the point of entry an incision is made down to the pleura and, if there are no adhesions, it is punctured and a catheter is introduced to make sure there is a pleural cavity—if a cavity exists the needle is connected to the nitrogen apparatus. The gas, which is controlled as regards its pressure of entry by a manometer, is previously passed through a solution of corrosive sublimate and a filter of cotton wool (sterile). When this operation is combined with thoracoscopy and cauterisation of adhesions good results are obtained, especially where the adhesions are preventing the collapse of cavities in the lung. A large number of complications may arise as a result of this treatment, and must therefore be considered. They are :—

(i) Hæmorrhage from intercostal vessels.

(ii) Injection of gas into intercostal vein.

(iii) Infection by use of impure gas, infected trocar, or improper antiseptic preparation of chest.

(iv) Rupture of infected foci into pleural cavity.

(v) Dyspnœa from use of too large a quantity of gas.

(vi) Puncture of lung by cannula.

The majority of surgeons at the present time are of the opinion that lobectomy or resection is the best method of treating bronchiectasis if any benefit is to be obtained. The mortality, however, is very high, and the cases best treated are those which have a fairly good physical condition and in which the disease is localised to one lobe. The problems which have to be considered in this operation are the production of acute surgical pneumothorax, the treatment of the bronchial stump and the control of infection. In order to consider the operative procedure a distinction must be made between resection of the lung and excision of a lobe. In the former method there must be sufficient normal tissue left in order to cover the divided bronchi, whilst in the latter method the lobe is freed to a pedicle consisting of the bronchi and the main vessels.

The type of operation, whether a one- or two-stage, depends on the condition of the patient, and the anæsthetic which is generally used is ether. A few days before the operation postural treatment by Gavin's method is advisable for the purpose of evacuating completely the contents of the cavity. The approach to the lung is obtained either by

intercostal incision or by resection of a rib or resection of three to four ribs. When the latter is performed it not only gives a better exposure but subsequently it helps to obliterate the cavity left by the removal of the lobe. Adhesions are almost certainly present between the involved lung and the parietal pleura, the diaphragm and the adjacent lobes. These must be separated so that the diseased portion is freed down to a pedicle consisting only of bronchus and pulmonary vessels. There are two methods of dealing with the pedicle, for it may either be resected or amputated.

In the method of resection the pedicle is controlled by a clamp, which includes the bronchi, and the vessels and the lung are excised by an incision which travels a little distance from the clamp, and thus is carried through the tissue of the lung. The individual bronchi must now be crushed and tied, a performance which must be repeated in the case of the vessels. All vessels and bronchi having been ligatured, the amount of lung remaining must be sutured over the divided structures.

If amputation be the method employed a crushing clamp is placed on the pedicle and the lung is excised distal to it, a mass ligature controlling the stump. Lilienthal, however, secures the stump by chain ligatures of strong chromacised gut and, after the removal of the lobe carbolises, and ligatures the individual structures distal to his first ligature. The stump in every case sloughs and is discharged several days after the operation. Experience has shown that the stump frequently leaks, and the dangers from this and from infection are so great that complete closure at the time of the operation is not advisable. Drainage is effected by means of gauze or rubber tubes, and the final closure can be made in a few days. The complications arising out of this treatment are pneumonia, bronchial fistula and empyema.

Graham, of St. Louis, showed that the mortality in 48 cases of lobectomy for bronchiectasis was 52 per cent., being due mainly to infection. He therefore came to the conclusion that if the removal of the diseased tissue was performed by cautery it would bring the danger to a minimum. His results, using the cautery, were very good, and showed a complete cure in 20 per cent.; a cure, save for the slight inconvenience of a bronchial fistula, in 30 per cent.; marked improvement in 15 per cent.; whilst the mortality was only 20 per cent.

The method which he used was to turn up a flap of skin and remove about 10 c.m. of three or four ribs, together with the intercostal muscles, vessels and nerves. The exposed ends of the ribs were then packed with bone wax in order to decrease the danger of osteomyelitis, whilst the intercostal nerves were injected with alcohol to anæsthetise the wound. Adhesions are sought for and, if found, the remaining part of the operation can be proceeded with, but if not a gauze pad must be inserted for a few days in order to produce some. When the necessary adhesions are present the first cauterisation can be performed with a large soldering iron, heated to a red heat. An excavation is made in the lung and the cavity cauterised out, care being taken not to go too deeply at the first application. In some cases one cauterisation is sufficient, but in others it has to be repeated six or seven times. If hæmorrhage from a large vessel should occur the operation should be discontinued and the wound packed with gauze. In two or three days this packing can be withdrawn without any danger of a fresh hæmorrhage. The immediate effect of this procedure is that while the cautery is in actual contact with the lung a period of apnœa may last for 30 seconds. Smoke is exhaled from both the nose and the mouth, and in cases where hæmorrhage has occurred a blood-stained expectoration is present. No signs of shock are observed during the operation.

In most cases a pyrexia occurs on the third day, together with a feeling of lassitude, loss of appetite and occasionally nausea and vomiting. All of these symptoms are probably the outcome of intoxication from the burnt tissue, and they serve to demonstrate the necessity of not doing too great a cauterisation at the first stage.

When the slough separates on the tenth or twelfth day these symptoms disappear, but in their place comes a cough and sputum which is even more troublesome than before the operation. As soon as the separation of the slough is complete and the bronchioles are able to discharge their pus freely to the exterior all these signs clear up and the patient once more approaches his normal health.

(*To be continued*)

Clubs Union.

President—F. J. Steward, Esq., M.S., F.R.C.S.
Chairman—W. M. Mollison, Esq., M.Ch.
Committee—A. R. Thompson, Esq., Ch.M.; J. J Conybeare, Esq., M.C., M.D.; R. Davies-Colley, Esq., C.M.G., M.Ch.; Prof. T. B. Johnston, M.B., Ch.B.; D. B. Smallshaw; G. M. Housden; O. Ive; D. E. Dunnill. *Hon. Treasurer*—W. Kelsey Fry, Esq., M.C., L.D.S. *Hon. Secretary*—R. L. Duchesne, Esq., L.D.S. *Hon. Assistant Secretary*—G. J. Clarke. *Finance Sub-Committee*—The Hon. Treasurer, The Hon. Secretary, G. J. Clarke, D. B. Smallshaw.

Auditors of Clubs' Union Accounts—Messrs. Kemp, Chatteris, Nichols, Sendell & Co., Chartered Accountants.

PORTRAIT of A DENTIST
by a patient.

"So, you see, you needn't worry too much about your personal appearance."

On the Carriage of Sick and Injured by Aeroplane in Civil Life.

By T. B. Layton, D.S.O., M.S.

FROM October 30th to December 9th, 1917, in the series of engagements from Beersheba to Jerusalem, 35 men wounded in the abdomen passed through the Field Ambulance commanded by the writer. By January 1st, 1918, all were dead. With all the advances of surgery, when warfare was really mobile, the man wounded in the belly had no more hope in the Great War than he had had in the Boer War, as the result of experience in which the teaching of the R.A.M.C. was that the man's best chance was to set him up where he was hit and to keep him there. After such experience as this, and during the further campaign in the Jordan Valley, the writer often thought how easy it should be for an aeroplane to pop down and pick up the poor fellow wounded in the abdomen and to take him back to a C.C.S. at Gaza, a Stationary Hospital at Kantara or even a General Hospital at Cairo with no more shock than we then gave him in taking him to the Main Dressing Station. To get him at once to some place where he could be nursed and kept after his wound had been tended was our desire. Surgery could be done anywhere to save life. Freedom from movement after the operation was needed and the aeroplane, alone of vehicles, could get the wounded man to the spot where this was possible.

It was therefore with the utmost interest that on a recent visit to Bordeaux I accepted an offer to see what was being done in France to transport the sick or injured through the air. Our leaders have told us there shall be no more wars, but we can hardly expect to escape from small wars, and in Morocco, as well as Syria, the French have evacuated over 3,000 wounded by aeroplane. It was, however, the application of this experience to civil life that had interested our host, Dr. Robert Picqué, who is Médecin-Chef of the aviation service as well as Professor of Anatomy in the University of Bordeaux. Two planes are used in the Army. The larger has space for two patients lying down and one sitting up. The sitting place may, however, be occupied by an orderly or a medical officer. The cabin is fitted up with electric blankets and bottles, an oxygen cylinder, bed pan, etc. The smaller plane has space for one case only, lying in a sort of wire bassinette.

Dr. Picqué claims that the aim of a flying medical service in the mother country must be to give everyone injured or seriously ill who cannot be conveyed by other methods appropriate treatment under the best conditions at the earliest moment.

"Such may seem an illusion in a civilised country with a dense population rejoicing in the advantages of an accentuated decentralisation which has sent out everywhere a swarm of surgeons, while multiplying hospitals and nursing homes."

Dr. Picqué claims, however, that there are certain conditions where the aeroplane will be of value :—

1. There are certain outlying spots where up-to-date surgery cannot be well done. From such places cases of acute appendicitis, perforated gastric ulcer or of ruptured ectopic may rapidly be brought into some surgical centre.

2. So also with severe accidents, big injuries to the limbs, injuries with possibly visceral complications such as those of the vertebral column, the pelvis or the chest, injuries to the abdomen or head injuries.

For these single cases the small plane is most useful. It can land in a smaller area ; one of 200 metres square is all that is needed. An aviation post of adequate size must necessarily be some way outside a large city, and it will be necessary to develop small landing areas more accessible to the hospital. Such a thing has alrea dy been done at Bordeaux, where a generous donor has given a small landing area 1,800 metres from the hospital, the air post of Merignac being 10 kilometres away.

3. The larger plane will, however, be of more use in those catastrophes that occur from time to time and cause a large number of injuries, all urgent. Under these we may class train wrecks, mine explosions, etc., etc.

But acute cases do not cover all the possible uses. There is room for the use of the aeroplane in chronic cases as well.

4. Bed-ridden patients who are advised to go to the sea or other places of health—*e.g.*, tuberculosis of the spine.

5. Paralytics who wish to go on a pilgrimage.

6. Those suffering from mortal disease who wish to die at home. Dr. Picqué instances an aviator with a fractured neck who wished to return from Bordeaux to Prague before he died.

7. To the invalid the ease and rapidity of transport afforded by the aeroplane are of greater value than to the healthy traveller and one, who would

not be strong enough to stand the journey to Marseilles, might go there by air and thus be enabled to reach a boat for Egypt or for India.

8. Professor Picqué envisages the wealthy invalid flitting from home to Plage and back, migrating from the Channel to the Riviera year by year, and a company supplying aeroplane ambulances for this purpose.

An opportunity was afforded me of trying to estimate the sensations of an injured person in the plane. The bassinette in which one lay was very comfortable. The plane started ; there were some fumes which would be unplesaant to a sick person. Then succeeded a terrible bumping over the rough ground. The plane had to " taxi " the length of the aerodrome and half back to get the right direction of the wind. This would be a terrible time for any injured person, for one with a fracture, say, of the femur—excruciation. Then suddenly all this was over and was succeeded by perfect peace. No gentler movement by any form of transport can be imagined. In landing, one horrid bump—a terrible shock to the fractured femur. Experience has shown that over rough ground a motor ambulance was worse for the patient than a desert cart, the desert cart was worse than a camel, and a mule litter least painful of all. The aeroplane must come at the two extremes of these. For a few seconds worse than the motor ambulance, for the rest more easy and more gentle than the litter. On any but the best road surface the only argument in favour of the motor ambulance was its speed and the time thus saved. So rapid is the plane that this must more than compensate for the jerking at the start and the bump at the end. That there is great scope for such transport in the future there can be no doubt.

It will be in the " new " countries of large area that it will first be valuable. In Australia—where an organisation is already coming into existence—in the further parts of Canada, in South Africa, and those other parts of Africa of vast extent that now come under our flag, but are as yet but thinly peopled. In these areas the telegraph or wireless, in association with aviation, should bring succour to many a sufferer, save certain valuable lives and, above all, give that sense of security which is lost in solitude, where one wakes up with the thought that if some dire disease suddenly comes over one no one is by to help and there is not even a dog's chance of recovery.

That, under existing circumstances, there is much scope for it in this country may be doubted. In the Highlands of Scotland, in Wales and in the islands around our coast it may have value. Probably in all other parts hospitals and surgeons are so close and road surfaces so good that the motor will beat the aeroplane for efficiency. It is all a question of landing places. At present you cannot get a landing stage next door to the hospital and the motor must still come in for the remaining way. This will be solved somehow, perhaps by the planes gliding down on to a very small space, and we shall see planes landing on the roof of Hunt's House above the new Clinical Laboratory. Perhaps the helicopter will solve the solution and the surgeon, called back from his game of golf in Norfolk, will alight to one side of Guy's statue as the ambulance plane with an accident from the Mendips drops down upon the other.

Reference—

" L'Etat Actuel de l'Aviation Sanitaire en France." Par le Dr. Robert Picqué, Médecin-Chef a l'Hopital Militaire de Talence, Professeur a la Faculté de Médecin de Bordeaux, *Archives Medicales, Belges.*

Specialities.

" POMSOMA "

SUFFERERS from insomnia, neurasthenia or nervous irritation will be pleased to hear of " Pomsoma," an effective soporific, without any detrimental after effects.

It is highly recommended by medical men, from whom the proprietors have received many testimonials vouching for its excellence.

" Pomsoma " is sold in glass tubes containing 20 tablets each, price 3*s.* per tube. It is supplied to the medical profession only.

A sample will be sent on application to the Sole Agent for Great Britain and Colonies, E. G. Ashdown, 33, Churchfield Mansions, Hurlingham, London, S.W.6.

THE MEDICAL GENERAL INSURANCE ASSOCIATION, LTD., 67, Queen Street, E.C.4.

THE attention we drew in a recent issue to the exceptional terms of Motor Car Insurance offered by the above Association appears to have aroused considerable interest, many readers having already availed themselves of the substantial advantages to be secured. (See Advertisement on page xi).

Nursing News.

Entered for the Chartered Societies Examination and passed:—

Conjoint—Miss Bowman, Miss Bailey, Miss Horler, Miss Martin, Miss Thomas, Miss Walker.

Teachers (passed Anatomy)—Miss Macfarlane.

Electrical—

Correspondence.

The Lister Centenary.

SIR,—The recent Lister centenary reminded older surgeons of the carbolic spray. I was told by a Bart.'s consultant that its use was given up there in the '80's, but I was a Clerk to the late Sir Henry Howse in '92, when he still used it.

In '98 I had great difficulty in finding a spray for preservation in our Museum of Antiquities. Can any old Guy's man inform me through your columns when Sir H. Howse ceased to use the Lister spray? It would be interesting to know if I am right in thinking that Guy's was the last hospital in which it was used.

Yours,

C. H. F.

Reminiscences.

DEAR SIR,—I was much interested in your correspondent's memories of 40 years ago. I expect I was of the same year, and the smell of eucalyptus still suggests the Borough to me also. I heartily endorse his remarks on the diagnosis of scarlet fever. Whilst at Guy's I attended the first course of instruction in fevers, held by Dr. Caiyer at Stockwell, and for many years had very little trouble with diagnosis, but now I have a good deal and am glad to find I am not singular.

Quite recently I saw two boys on the same day—in no way connected one with the other. Each had slight rise of temperature, with characteristic throat and tongue and slight rash of scarlatiniform type. I waited a long time for the first to peel and eventually he did, on hands and feet only. The second did not peel at all.

I had temporary charge of a small isolation hospital and a case was sent in which did not show the slightest peeling, and the man who sent it was an experienced man. Outside the hospital I had a similar case exhibiting all the characteristic symptoms, and that did not peel. If a case does exhibit such symptoms what can one do but notify it? It seems as if the complaint was becoming milder, but that it is not always so the following experience will show.

A lad who was being treated for "quinsy"—not by me—was noticed by the neighbours to be peeling while mixing with others. He infected a girl of 11, who returned from Sunday School feeling ill and went to bed. Next day she had a rash and the morning after that I was sent for and found her moribund. The next morning I had to see her sister, aged 16, who had a temperature of 105°, acute pharyngitis and was extremely ill. She eventually recovered after suppuration of both tonsils and of glands on both sides. A brother had an attack of exceptional mildness. The first boy also infected a little girl who was staying in the village. She went home and developed an attack which was fatal in 48 hours.

I am, sir,

Yours faithfully,

"1887."

Miss Louisa Harriet Denham.

DEAR SIR,—You may have noticed in *The Times* of the 1st instant that the death was there recorded of my spinster sister, Louisa Harriet Denham, at the age of 86. She was the daughter of the late William Hempson Denham, M.R.C.S., L.S.A.

It must be considerably over 100 years ago when my father graduated in anatomy and general hospital practice at your Institution, in the time of Sir Astley Cooper, rightly held to be one of the greatest surgeons.

I have a bound volume of the *Lancet* bearing his date—1813—when he was evidently one of your students, with the honorary special privileges granted to one then known—and perhaps now—to those enrolled as perpetual pupils. I remember—when a young man—he had a profound knowledge of anatomy, mainly gained through the teaching at your Hospital and the intimacy he had with Sir Astley Cooper and his lectures.

One of my sister's last sayings—rejoicing, as she did, in Jesus Christ as her Saviour and Lord—was, "Jesus is very precious to me *now*," and as, at the age of 86, one is ordinarily accustomed to associate the term senility—an age weakness in mind—I suddenly said, with other difficult words, "Spell me the word 'phlegm,'" and she instantly spelt it clearly, deliberately and in the most correct form, slowly dividing letter by letter as if she appreciated the object of the test. She was a woman of remarkable intellectual gifts, retained to the very last. She believed in Christ 40 years ago, lived consistently in Christ, died in Christ. How sweet thus to enter Eternity! "Unto *you* therefore which believe He is precious" (1 Peter ii, 7).

Yours faithfully,

ALGERNON ASTLEY DENHAM.

197, Brentwood Road,
Romford, Essex.
April 13th, 1927.

An Amusing Incident.

DEAR SIR,—The following amusing incident occurred this morning, and I think it is worth recording in the GAZETTE.

I was about to do a Cæsarian and the patient was being anæsthetised. During the stage of excitement she called out: "Give me the Labour Exchange, please. Tell Mr. P. he is the father of a son."

Yours faithfully,
WILLIAM F. BOX.

Bridge House,
Stratford-on-Avon.
April 21st, 1927.

Reviews.

Bacteriological Atlas. By RICHARD MUIR, M.D. Published by E. & S. Livingstone. 1st Edition. *Price* 15*s*. *Postage* 6*d*.

THIS Atlas was prepared to be used in association with the various text books on bacteriology, with the idea of giving a good pictorial representation of the different pathogenic micro-organisms as seen with the microscope. Opposite each plate is a short description of the illustrated features, but no attempt has been made to go fully into the morphology or biology of the various organisms. As a companion manual this forms a valuable addition to bacteriological text books, which are, as a rule, very poorly illustrated, but it is doubtful whether the average impecunious student will feel able to buy so expensive a book in addition to his ordinary text book. The illustrations and text are a model of good printing, and a pleasing feature is the addition of two blank pages between each of the plates.

Your Hair and Your Health. By OSCAR L. LEWIN, M.D. Published by Wm. Heinemann (Medical Books), Ltd. 1st Edition. *Price* 6*s*.

THE doctor, unmindful of his humble origin, has reft the lancet from the hand of the barber and left him only his pole as a reminder of his former glory. Now that the barber has in general abandoned the insignia of his ancient and honourable profession, a fresh onslaught has been launched against him and the doctor threatens to run him out of business altogether, and one can almost see the day when the President of the Royal College of Surgeons will examine young aspirants in the proper mode of performing the bob or the shingle trim or, clad in his robes of office himself, demonstrate the mysteries of the water wave or the permanent, or pseudopermanent wave after the original technique of the great master—Marcelle. Indeed, when every branch, however circumscribed, has its specialists why should criniculture be neglected? There are still more fields to be explored. Let Chiropodists tremble!

Dr. Oscar Lewin, of Cornell University, pleads that the all too exiguous hair which, in the words of some thrice accursed scribe, constitutes our crowning glory, is too precious to be entrusted to the ignorant hands of those who imagine that cut hair, unsealed by singeing, loses its nutriment, and whose remedy for baldness caused by toxic processes and endocrine disturbances is the application of ingenious and costly unguents and pomades. His book is designed mainly for the lay public, and is crammed with information couched in simple language. I, personally, have learnt more about hair than I thought was possible, and as a result I am inaugurating a new and intensive campaign to combat the relentless approach of baldness with renewed hope and with the more tenacity that he, robbing me of my one consolation, assures me that baldness is not an infallible sign of the activity of the subjacent brain. Scribbling medical publicists will find all that is necessary in this book for the inspiration of sensational articles in the Sunday Press as to whether the modern girl will grow bald and so forth, but serious readers will find much in this simply written book, which should prove of use to him in his practice and in his own domestic life.

Principles of Physical Chemistry for Medical Students. By P. N. TOOKEY KERRIDGE. Published by Humphrey Milford (Oxford University Press). 134 pages, 22 figures. *Price* 5*s*.

THIS little book should be of use to the medical student in directing his attention to the important place physical chemistry is taking in the solution of physiological and medical problems, and to the fact that a knowledge of the elements of physical chemistry is of great use to the student of biology, physiology or medicine.

The book is divided into two sections—theoretical and practical. The theoretical section deals in an elementary manner with those principles of physical chemistry which have been found of service for

application to medical problems. The author has shown in an interesting manner how physical principles are applied to respiration and the oxygenation of the blood. The changes in the rate of flow of the blood due to changes in the viscosity of the blood in cases of asphyxia and fever are quoted. The question of osmosis is discussed in connection with the blood in particular. Since, in Nature, all equilibria are dynamic and not static, the law of mass action will have its application to medical problems, and plenty of examples are given throughout the book. The student who already has a working knowledge of physics and chemistry will regret that space has been devoted to explaining the gas laws, surface tension, etc. Most readers will, we think, wish that the last two chapters—on enzyme action and colloids—had been considerably extended, and that a few references or a short bibliography had been added. The interested reader would like to have the reference to Haber's original paper on the glass-electrode (page 89).

In the practical section the author has described methods for the determination and comparison of some physico-chemical constants of physiological and other fluids.

We are a little surprised that the author thinks the medical student should not reset a Beckmann thermometer because "Beckmann thermometers are delicate and very expensive" (page 113), and hope that in a subsequent edition this unfortunate suggestion of lack of care on the part of the medical student will be removed.

Treatment of Venereal Disease in General Practice. By E. T. Burke, D.S.O., M.B., Ch.B. 1st Edition. Published by Faber & Gwyer, Ltd. *Price 5s.*

THE aim of this work is to give a detailed and practical account of the proper treatment of a case of venereal disease by the general practitioner. It contains many points of interest, from the theoretical as well as from the practical point of view, although the author's occasional lapses into flippancy are to be deplored. Cynicism in a text book on venereal diseases is inevitable, but Gibbon is a safer model than Stephen Leacock. In the treatment of syphilis, Dr. Burke would abandon mercury altogether in favour of bismuth, but his statement that 90 per cent. of Wassermann-fast cases become negative on the latter drug would not be accepted by most observers. There are detailed accounts of the technique of intravenous and intramuscular injections. The former is made out to be a more formidable operation than it appears in the anneex, where the patient is neither kept lying down on a settee for 15 minutes nor brought a cup of tea after the injection!

The schemes for courses of treatment in syphilis are, on the whole, nice and clear and are on the right lines. Everyone ought to have a scheme, although prepared to modify it or depart from it altogether whenever necessary, the author himself subscribing to the wise dictum that one should treat the patient rather than the disease. It would have been more helpful, however, if the usual doses for patients of average weight had been inserted, including the usual dosage of infants. The treatment of tertiary syphilis is unusually vigorous, and there would seem some risk of jaundice, as no prophylactic doses of sodium thiosulphate are recommended. The importance of treating any pregnant woman who has had syphilis, even if her Wassermann test has become negative, is not stressed, though subscribed to by most venereologists.

The author's arguments against the use of strong antiseptics in gonorrhœa are interesting and forcible. He argues that the gonococcus being in a state of virulence is in good physical condition, whereas the body-cells in its vicinity have deteriorated and possess less vitality than the healthy gonococci. The effect of strong antiseptics is therefore likely to cause the death of the cells of the mucous membrane before that of the infecting organisms, thus providing a further supply of devitalised material, on which the gonococcus and its accompanying secondary organisms can flourish.

The difficulty in the treatment of gonorrhœa by the general practitioner is usually a financial one, the majority of patients being unable to pay adequately for the frequent visits and the time expended in the necessary sterilisation of the apparatus. The practitioner, however, will find all information as to treatment here. The author is a little inconsistent in his treatment of the two sexes; he will not allow his male patient to irrigate himself, but he permits his female patient to irrigate her bladder and to give herself a douche at high pressure. In private practice a visiting nurse can usually be found who can carry out both these manœuvres much more effectively—and less dangerously—to the patient.

Difficult Labour. By S. J. Cameron and John Hewitt. 1st Edition. Published by Edward Arnold & Co., London. *Price 10s. 6d. net.*

ALTHOUGH there are already many good text books of midwifery for the student to choose from, the appearance of this book will be welcomed, since it is addressed mainly to

the practitioner and is concerned only with abnormal labour.

It has the further merit of not attempting to be an exhaustive study of the subject, but merely sets forth, in a very clear manner, the methods of diagnosis and treatment which the author's have found most satisfactory in their own practice. One feels therefore that all the recommendations in treatment have the merit of being based on practical experience, although in some cases they are not by any means universally accepted.

The section on " Complicated Labour " is very clear and should prove specially useful to practitioners, since the advice given is as concise as possible and is freed from much of the controversy which so often leaves the reader quite at a loss, when some definite line of treatment is sought.

In a book of nearly 300 pages it would seem that more than 10 pages might have been devoted to the prevention of difficult labour. As it is, the chapter on ante-natal care is very scanty and quite inadequate.

There is no doubt that in this book many practitioners will find much useful information presented in a very clear manner.

A Text Book of Midwifery. By R. W. JOHNSTONE, M.D., F.R.C.S.(Eng.), M.R.C.P.(Eng.). 5th Edition. Crown 8vo, pp. 495, containing 258 Illustrations. Published by A. & C. Black, Ltd. *Price* 15*s*.

THE fifth edition of this excellent book is slightly larger than the previous one and much of it has been entirely rewritten, a step made necessary by the recent advances made in the practice and theory of obstetrics.

The book is divided into eight sections.

Section 1 deals with the anatomy and physiology of the female genital organs and pelvis. The phenomenon of menstruation is discussed at some length, and an interesting chart is included in this chapter showing the chronological relationship that exists between the menstrual cycle in the endometrium and the ovarian cycle. The subject of menstruation has been studied in the last 20 years along two main lines—firstly, comparative physiology and, secondly, the physiology of the ovary. Comparative physiology suggests that menstruation has some analogy with the phenomenon of œstrus or " heat " in lower animals, and the conclusion reached is that the stage of actual menstruation is analogous to the stage of proœstrum in lower animals. The second line of research has shown that there is a definite connection between the ovary and the uterus which is not nervous but blood-borne, probably of the nature of an internal secretion. The author comes to no definite conclusion as to the origin or nature of this hormone, but he suggests that the evidence shows that the corpus luteum produces it and sets the menstrual cycle in motion. He does not, however, offer any explanation as to why menstruation should last for only 7 days, whereas the corpus luteum of an unfertilised ovum is present at the end of two months, nor yet why menstruation should cease after fertilisation of the ovum, in which case the corpus lutuem persists during the whole course of the pregnancy. An interesting point is raised in the relation of the menstrual hormone to the other ductless glands. He suggests that the definite excess of calcium salts present in the menstrual loss is the means whereby the body rids itself of its monthly accumulation of calcium, which has been stored up with a view to the needs of an embryo should pregnancy occur.

Section 2 is devoted to the physiology of pregnancy. The early development of the ovum and the development of the placenta are described in comprehensive language, and this portion of the subject is rendered more easily understood by the numerous illustrations, some in colour, which accompany it. Those relating to the development of the placenta are particularly instructive.

The next point discussed is the changes which take place in the maternal organism consequent upon impregnation. The uterus commences to enlarge at once, the enlargement being due chiefly to hypertrophy of the already existing muscular fibres. The skin becomes pigmented, the breasts enlarge, while there is some tendency to dilatation of the right heart and to some slight compensatory hypertrophy. There is, however, only very slight change in the blood, which consists of some increase both in the red cells and in their hæmoglobin content. The diagnosis of pregnancy is divided into three parts—the presumptive signs, which are the symptoms observed by the patient, such as amenorrhœa, morning sickness, and mammary changes; the probable signs, which are the physical signs elicited by the physician on examination, *e.g.*, change in size, shape and consistency of uterus. Hegar's sign is described at some length and is regarded by the author as " one of the most important of the signs to be elicited in the first three months." Braxton Hick's sign is described, as well as other signs which might well be omitted—Jacquemier's sign, Osiander's sign and Kluge's sign. Ballottement is described as a good positive sign of pregnancy, but not absolute, and one which cannot be classed along with the fœtal heart beat or active movements. Abderhalden's serum test is briefly mentioned, but its value is uncertain, as it is not clear whether in other conditions, such as cancer, the serum may not give the same reaction.

Lastly, the positive signs, which are hearing and counting the fœtal heart beat, feeling fœtal movements and recognition of a fœtus by palpation are mentioned.

A chapter is devoted to the hygiene of pregnancy and the methods of ante-natal supervision. Emphasis is laid upon the greater importance of the relative proportion or disproportion between the pelvis and the fœtal head than of the many measurements which some obstetricians delight in making with callipers and other instruments. Many a live baby, which the callipers said could not be born, has been born through the natural passages in a normal manner. This chapter on ante-natal work is very instructive, but such an important part of the subject surely deserves greater space. This might be provided by deleting the many unfamiliar types of abnormal pelves which are described and illustrated later, such rarities as the Nægele pelvis and the osteomalacic pelvis, which do not even merit an academic importance.

Section 3 deals with labour in the various presentations. The clinical course and management of a normal labour is first described, and emphasis laid on the fact that the medical attendant is there only to assist, should any complication arise, rather than to endeavour to improve upon the natural course of Nature. The mechanism of labour is described in a very clear manner, and various theories are put forward as to the cause of the behaviour of the fœtus during parturition. Chloroform should, according to the author's view, be given in slight amount on an open mask in every normal case when the pains become so severe that they cause serious suffering. The age when the sufferings of the mother were made an offering to the god of Parturition should have come to an end by now and a new era taken its place.

Abnormal presentations and their treatment are next described.

Section 4 deals with the physiology of the puerperium.

In Section 5 the pathology of pregnancy is discussed with the treatment to be adopted in the several conditions which may arise. Hyperemesis gravidarum is described as of two kinds—neurotic and toxic. For the former, treatment by isolation —preferably in an institution where the patient is not going to be fussed over by sympathetic friends—rectal feeding, kindly discipline and suggestion; for the latter, rapid evacuation of the uterus without delay is advised. Eclampsia is fully considered and both its ætiology and the theories relating to its causation are well thrashed out. However, no definite conclusions are reached. Treatment can be either medical or obstetrical. The guiding principles in medical treatment are two in number—(1) to prevent the convulsions, and (2) to flush the toxins out of the body. To do this, eliminative treatment must be carried out. Washing out the stomach, repeated high lavage of the colon, absolute starvation, with free administration of fluid are recommended. Drugs take a secondary place and veratrone, cautiously administered and rarely repeated is, perhaps, of most value. Obstetrical treatment should never be done half-heartedly. Two schools of thought exist, and either one or the other should be followed, and not a mixture of the two. The first believe in emptying the uterus at once, while the second believe in leaving it severely alone, allowing labour to occur spontaneously and then expediting delivery. Of surgical measures decapsulation of the kidneys and lumbar puncture are suggested, but, of these, the former should be restricted to cases in which the fits have continued in spite of evacuation of the uterus, while the latter has, on the whole, disappointing results. In a large chapter on the subject no mention is made of the treatment of eclampsia by Cæsarean section.

The remainder of the book is devoted to the pathology of labour, the pathology of the puerperium and operative obstetrics.

For its size this book is filled with a most complete and comprehensive survey of the subject. The print is clear, the illustrations many, and for the most part excellent, and the book is one which may be read with advantage by both students and practitioners alike.

Short Notes and Mnemonics of Anatomy. By A. S. Irving. 3rd Edition. Published by E. & S. Livingstone. *Price* 1*s.* 3*d.*, *Postage* 2*d.*

FOR those who use mnemonics this book is certainly a convenient size, as it will readily slip into the smallest of waistcoat pockets. Apart from its size it has nothing in it which would make one at all anxious to possess it. "All things in moderation," and this wise saying applies to mnemonics equally as well as to the amount of wine one should drink at dinner. To produce a book containing mnemonics for every branch of every artery appears to us ludicrous. For example, the branches of the sciatic artery are five in number, viz., coccygeal branch, to the sciatic nerve, muscular, anastomotic and articular. He who buys this book will learn this by repeating to himself the following enlightening phrase, "Charlie Chaplin's movements are amusing." No, we do not recommend anybody to read this work.

Lenk's Index and Handbook of X-Ray Therapy. Translated by T. I. CANDY. Published by Oxford University Press (Milford). 1st Edition *Price* 6*s.* 6*d.*

THIS small book, written by Dr. Lenk, assistant to Professor Holzknecht, represents the views of the Vienna School on X-Ray Therapy.

At the present time, X-Ray therapy in England is chiefly centred on the treatment of malignant disease and it is the endeavour, both of the author and the translator, to show that the action of X-Rays in depressing cell function and cell growth has a very much wider application than is generally appreciated.

The bulk of the book is devoted to discussion of those diseases in which X-Rays have been found to have beneficial effects. The mode of action of the rays, the amount of radiation and the prognosis, is given for each disease. To express the amount of X-Rays to be administered a complicated formula has been devised which, although intended for the general practitioner, necessitates a certain amount of technical knowledge in order that it may be interpreted.

The recent work of the Vienna School on the results of treatment of acute infections by small doses of X-Rays is mentioned and the reader will probably be interested in the application of X-Ray therapy to tubercular infections of the lungs, bones, larynx and lymphatic glands.

Medical Electricity and Radiology. By J. R. RIDDELL. Published by E. & S. Livingstone. 1st Edition. *Price* 8*s.* 6*d.*

A VERY wide field is covered by this book, for the author deals with medical electricity, radiology (diagnostic and therapeutic), radium therapy, actino-therapy and the application of carbon dioxide snow.

In the section on X-Ray therapy good results are claimed in the treatment of tubercular glands and joints, hypertrophy of the prostate and uterine fibroids. The figures of Beclere are quoted to support the statement that X-Ray therapy is the ideal treatment for intra-mural uterine fibroids.

Regarding radium, it is pointed out that it is the gas or emanation which is the source of the active radiations which are of therapeutic value. The methods of application and the dosage are described. Comment is made on the intense and very localised action of radium, and for this reason the combination of radium and X-Ray therapy is recommended in the treatment of malignant disease.

As the book is intended for students, all these subjects are dealt with briefly and the object of presenting a concise survey of this branch of medicine is achieved.

The Nursing Mirror Pocket Encyclopædia and Diary. Published by Messrs. Faber & Gwyer, Ltd. *Price* 1*s.* 6*d.*

THIS small book is well worth buying by any Nurse who likes to carry a reference book in her pocket. It contains a fund of useful knowledge in very small compass and for a very moderate charge. It gives concise information in details of practical nursing treatment in medical, surgical and obstetrical cases and, in addition, gives much legal information, which is invaluable to nurses. The section on diet is well thought out and particularly helpful in the practical suggestions it makes for the feeding of patients suffering from different diseases. The diagrams, which elucidate the text and the various tabulations given help to make the book of definite value to Nurses studying for any of the State Examinations.

Advice to the Expectant Mother. By F. J. BROWNE, M.D. Published by Messrs. E. & S. Livingstone. Pp. 37. *Price* 6*d.*

THIS little pamphlet, written by the Professor of Obstetric Medicine in the University of London, contains the information which it is the duty of the medical man to impart to those of his patients who are about to become mothers. It contains six chapters dealing with the benefits of antenatal care, normal pregnancy, hygiene of pregnancy, common disorders of pregnancy, preparation for confinement and breast feeding.

It is written in extremely clear and quite unambiguous language and the statements of major importance are printed in large black type. It should be comprehensible to the crasiest of illiterates.

The doctor who could rely upon his patient having read this pamphlet need have no anxiety about overlooking any of the complications of pregnancy.

The pamphlet is written in language calculated to combine with information, the allaying, rather than the exciting, of the patient's apprehensions.

It is in no sense intended for the student, but it is warmly to be recommended to the general practitioner, who might do worse than to have several copies of his own to distribute to his midwifery cases.

Tuberculosis. By JAMES CROCKET, M.D. 1st Edition. Published by E. & S. Livingstone (Catechism Series). *Price* 1*s.* 6*d.*, *Postage* 2*d.*

APPARENTLY our student friend north of the Tweed finds this kind of book useful. We suspect that it is with him only during those few feverish months prior to his final, when a swelter of reading is to force tender and unnatural shoots from the tree of knowledge, anæmic upstarts that will wither only too quickly in the more even temperature of saner times. The binding of this 80 page questionnaire, almost Continental in its flimsiness yet creditable at the price, bears out our suspicion.

Most books, even cheap ones of a medical nature, promise something more than mere information. We find style, a craft of design, occasionally a brief glimpse of the author's personality in some considered opinion on a debatable subject. Of necessity, all these things are here denied us. An ungainly mass of interrogation is set down with admirable precision in logical arrangement. We have, in fact, a test viva on the multiple activities of one bacillus which may be of benefit to those whose medical or surgical confirmation is at hand.

This book should not be sold to examiners. For the sum of eighteen pence they might become positively lethal.

A Text Book of Bacteriology for Dental Students. By ARTHUR BULLEID, L.R.C.P.(Lond.), M.R.C.S., L.D.S.(Eng.). Published by Messrs. Heinemann. *Price* 15*s.*

WITH the rapid and elaborate development that occurs, in modern times, of the various branches of medicine and dentistry it becomes increasingly essential for authors to produce text books that, whilst giving a comprehensive resumé of the whole subject, will yet expand the portion that is of importance to a student in his particular branch.

Mr. Bulleid has successfully produced a book of this type on *Bacteriology for Dental Students.* About half of the book deals with general bacteriology, the remainder with a more elaborate discussion of the bacteriology of the mouth and the methods of investigation.

The first portion gives a general introduction to the subject, then deals in some details with the classification, morphology and biology of the common pathogenic organisms. Cultural methods, the preparation of media and stains are described. This is a concise and clear extract from the larger text books.

The two parts are carefully drawn together by emphasising the necessity of correlating bacteriological findings from other parts of the body with those from the mouth.

In the second portion the author has more opportunity to dilate upon his subjects of pyorrhœa, caries, etc., the associated organisms and full descriptions of the methods of obtaining cultures. The results of some original work by the author upon the liptothrix buccalis are introduced.

We are pleased to see that a chapter has been reserved for a description of blood examinations. This is frequently of vital importance in diagnosis in cases of anæmia associated with oral sepsis.

The concluding chapters give an easily readable and clear description of the essential facts concerning immunity and the preparation of vaccines and anti-sera.

Throughout the book the author has laid stress on the practical, as well as the theoretical, aspect of the subject, and this should make the volume more acceptable to dental practitioners. The clear type, arrangement of the subject matter and the large number of good illustrations help towards the utility of this book and commend it both to dental and junior medical men.

Applied Pharmacology. By A. J. CLARK, M.D., F.R.C.P. 2nd Edition. Pp. 423, with 54 Illustrations. Published by J. & A. Churchill. *Price* 15*s.*

PHARMACOLOGY is included in the medical curriculum in order to provide a scientific basis for the study of therapeutics. The student takes his examination in pharmacology in the pre-clinical period of his studies, when his knowledge of medicine must be either very slight or else entirely absent. There can therefore be no correlation between his pharmacological knowledge and its therapeutical application. The author has written this book expressly to bridge across this gap between pharmacology and therapeutics, and to demonstrate the connection between these two subjects. In doing this he has been entirely successful, and has produced a book which will well repay the reader for the time he expends in the reading of it.

The first two chapters are devoted to the action of disinfectants. The method of standardisation of disinfectants and the mode of action of each individual substance is described, and their uses for special purposes explained. Next, the subject of specific therapeutics is discussed, the actions and uses of arsenic and antimony, mercury and bismuth, and quinine and emetine being dealt with in a concise and thorough manner.

No theory is advanced to explain the specific action of mercury on the *treponema pallidum*, but experiments by Kissmeyer seem to indicate that it is not a simple disinfectant action. It is pointed out that satisfactory results are only produced by

mercury after prolonged action, the problem of mercurial administration consisting of an effort to maintain a maximal concentration of mercury in the blood stream over a long time and without producing toxic effects. The excretion of mercury is very slow, and therefore it has a marked cumulative action. The various methods of administration of mercury, whether by inunction, by mouth, by intramuscular injections or by intravenous injection have, as their primary object, the gradual introduction of mercury into the body until the accumulation of the mercury begins to produce toxic symptoms. A period of rest is then taken during which time the accumulated mercury is excreted. The excretion of mercury is discussed in some detail, though the conclusions reached seem to be rather vague except for the fact that the kidneys take the lion's share in this work. It is pointed out that the excretion is nearly always very irregular. At one time the urine will contain a large amount of mercury and then for some days will contain little or none, to be followed by another large excretion. This point has great importance, for, if not fully appreciated, it may be the cause of overdose following the formation of a wrong opinion that all the mercury previously administered had been excreted. The advantages and disadvantages of the several methods of administration are brought home in a clear and lucid manner, and it seems certain that the intramuscular injection of a non-water soluble preparation, such as calomel or grey oil (*oleum cinereum*), in sterile olive oil is the best method of administration.

The action of drugs on the central nervous system has four chapters devoted to it. The action of alcohol is shown to be purely one of depression, but, at the same time, the apparent progress of intoxication is not a uniform process, for the brain of the chronic drunkard can, apparently, become educated to the task of functioning when deeply depressed by alcohol, and may carry on with an outward appearance of normality until a late stage of depression. This point becomes of considerable practical importance in those cases where it is necessary to make a rough estimate of the degree of intoxication of a patient. Whether alcohol can act as a food is discussed at some length, the conclusion reached being that its value in this respect is very limited. This is because the alcohol enters the blood and is oxidised at a constant rate.

Throughout its whole extent the text is clear, concise, and very readable and is well illustrated with many graphs and instructive tables, and this book helps to a large extent to clear up the many difficult points concerning therapeutics which always occur during one's clinical studies.

A Handbook of Renal Surgery. By F. Mc. G. Loughnane, F.R.C.S. 1st Edition. Published by Longman, Green & Co. *Price* 10*s.* 6*d.*

THIS book has been written for the purpose of presenting to the reader an up-to-date account of practical renal surgery. In his object the author has succeeded admirably, and the student or practitioner will find in the work help and guidance in the more important points.

The introductory chapters deal with the anatomy and development of the kidneys, urine and urinary function. The chapter on renal pain and its varieties is excellent, and contains much practical information. Traumatic injuries of the kidney have a chapter devoted to them, and the treatment of these lesions is most concisely dealt with. In regard to the treatment of moveable kidney the author is less clear in his views. It is stated that "there is only one treatment adequate for moveable kidney, and that is nephropexy, combined with rest in bed and forced feeding. Abdominal belts are of no value."

Later, however, the author goes on to say that belts are of value only in the general visceroptosis of multipara. Nephropexy, however, is not a popular operation with the majority of general surgeons, and the general principle of replacing dropped viscera by surgical means is one which is becoming extinct, except in the hands of a few. As the author says, a kinking of the utero-pelvic junction is a definite indication for operative treatment. In regard to the treatment of hydronephrosis, plastic operations upon the ureter and pelvis are recommended whenever there is a prospect of cure by these means.

The diagnosis of tuberculous disease of the kidney is most concisely set out, and the author truly remarks that there is but one cure—early diagnosis and nephrectomy. The succeeding chapters of the book deal with renal neoplasms and renal calculi, the last chapter being concerned with the operative treatment of the kidney.

In addition to the general clarity and conciseness of the writing an attractive feature of the book is its size—which is not too large or too small; the matter is concentrated without being devoid of a sufficiency of explanatory detail. The book is one to be recommended to those who are in search of a good practical knowledge of the subject.

Sport.

Rugby.

THE "Rugger" team, having completed their programme for 1926–27, I enclose chart and statistics as of past seasons.

We won half our matches, playing, however, five more matches than last season. Four fixtures were scratched, three on account of inclement weather—these were Aberavon, Northampton and Gloucester, all at Honor Oak Park. Only in one match did we fail to score against our opponents—*v.* Birkenhead Park at Honor Oak Park. Full details of the matches can be seen in the following chart.

While no "stars" were discovered during the season, the team on many occasions played together well. The Hospital Cup was regained and mention must be made of the splendid work of the "A" and "Extra A," who won the Kent Senior and Kent Junior Cups respectively.

The following figures show our records for the past three seasons :—

	P.	W.	D.	L.	Points F.	Points A.	%
1924–25	31	16	3	12	291	230	56.45
1925–26	29	14	3	12	235	234	53.5
1926–27	34	18	3	13	371	294	57.35

The following have taken part in 1st XV matches during the season :—

Myburgh (32), F. H. B. Spence (31), Popplewell (27), Preen, Garland (26), G. T. Clarke (25), Boyle (24), Cameron (23), Schabort, Durr (22), Richmond (21), Lewis (20), Wilkinson (19), Cullinan, W. D. G. Jones, Malone (17), Simpson-Smith (16), L. Brown (14), Clogg (13), Morgan (12), Mostert (10), Radford, Ive (8), J. C. Hutchinson, A. Clarke (6), I. K. Thomas, Kurtz, E. W. Hutchinson, Van Schalkwijk (5), P. D. Spence, J. C. T. Tregarthen Van Niekirk, Barnes (4), Robinson (3), Lashmore, E. R. Clark, Doherty, Bergh, Smith, Johnson (1).

The following have scored tries :—

Lewis (15), Garland (14), G. J. Clarke (10), Preen, F. B. Spence (7), Wilkinson, Durr, Schabort (6), Mostert (5), Van Schawtijk (3), Ive, Jones, Morgan, Cameron (2), L. Brown, Smith, Radford (1).

The following have scored goals :—

	Tries Converted	*Dropped*	*Penalty*
Durr	22	0	4
Radford	8	0	0
Garland	0	0	1
Schabort	1	0	0
Thomas	0	1	0
E. W. Hutchinson	1	0	0
Preen	1	1	0
F. B. Spence	0	1	0
J. C. Tregarthen	2	0	0
Boyle	2	0	0

Making a total of—Tries, 90 ; Tries Converted, 37 ; Dropped Goals, 3 ; Penalty Goals, 5 ; Total Points, 371.

Our opponents' score was as follows—Tries, 63 ; Tries Converted, 25 ; Dropped Goals, 4 ; Penalty Goals, 12 ; 1 Goal from Mark, 3 points ; Total Points, 294.

Therefore the complete figures are :—

Played 34, Won 18, Lost 13, Drawn 3, Total Points for 371, Total Points Against 294, Average Points For 10.9, Average Points Against 8.65, Percentage 57.35 per cent.

ROY C. HOLLOWAY.

Hockey.

Guy's v. Staff College, Camberley.

IN this match, played on Wednesday, March 30th, Guy's were again beaten, curiously enough by the same score, 1–4, as on the 28th in the Cup match against St. Thomas's and through the same mistaken tactics of our defence.

The first half was practically in our favour, although the half time score, 1–2, was against us. Guy's started by pressing, but our opponents soon got together and their forwards were sent away and, passing and backing up well, scored (0–1). Guy's were quick to equalise from a smart cut through by Cautley, who passed to Catchpole, for the latter to score. The Staff College attacked in turn and a good centre from their outside right enabled their inside left to put them ahead (1–2). The Staff College soon after were forced to a corner, but our forwards did not avail themselves of the opportunity and their goalkeeper saved twice in brilliant fashion.

In the second half the play was of an up-and-down character, with Archer and Cautley showing up well ; the latter had bad luck with a couple of shots at goal. Willett was sound and frequently sent Lyne away. Guy's now seemed to have the upper hand till near the end, when the Staff College rallied and scored (1–3). This was soon followed by another from a concerted rush by their forwards, which Willett, coming back quickly, tried to check and in so doing unfortunately masked our goalkeeper, who did not see the ball (1–4).

Guy's Team—H. S. Gare ; F. E. Camps, G. N. Carrell ; C. N. Howitt, J. E. Willett, F. R. Hayward ; K. B. Wood, R. L. Cautley, C. A. W. Archer, R. Catchpole, H. O. Lyne.

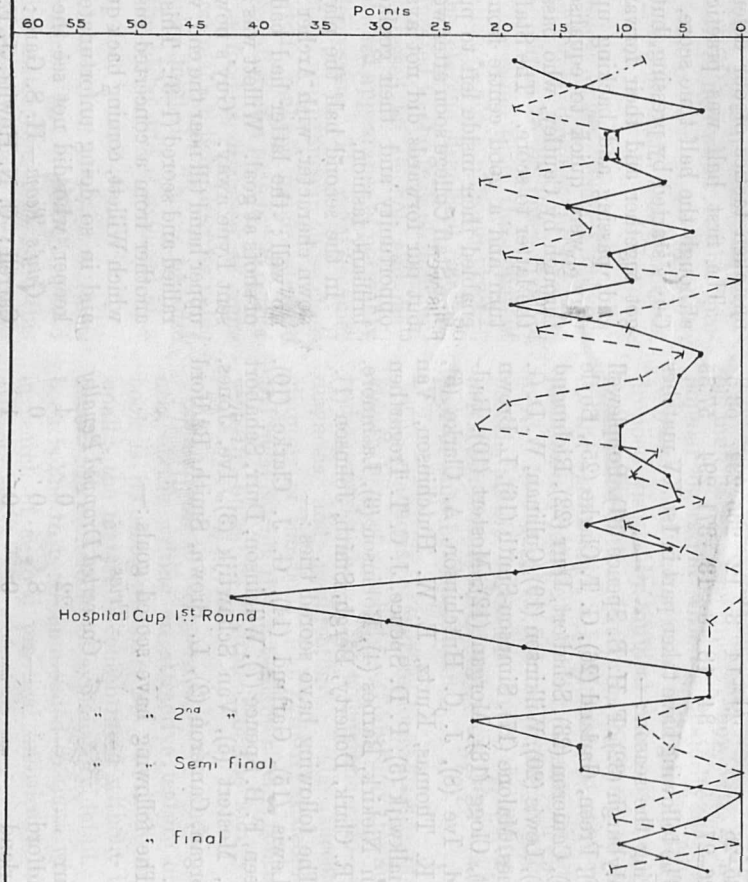
GUY'S HOSPITAL R.F.C.

SEASON 1926-27.

(For) **TOTAL POINTS** 371 — Average Points per Match 10·9

Percentage 57·35

(Against) **TOTAL POINTS** 294 — Average Points per Match 8·65



OPPONENT	DATE		Points F	A	G	T	F	A	TRY GETTERS	GOAL SCORERS
Catford Bridge	1926 Sept 18	H	19	8	2	3	1	1	Ive 2 Garland 1 Durr 1 Schabort 1	Durr 2
United Services	Oct 2	H	14	13	3Ø	0	2	1	Jones 1 Durr 1	Thomas 1 Ø Durr 2
Gloucester	" 9	A	3	19	1+	0	2	3		Durr +
Aldershot U.S.	" 13	H	11	10	1	2	2	0	Schabort 2 Morgan 1	Hutchinson 1
Bristol	" 16	H	11	10	2+	1	1Ø	2	Garland 1 Mostert	Durr 1 1+
Harlequins	" 23	H	6	22	2+	0	4++	2		Durr 2++
Old Blues	" 30	H	14	14	1	3	2+	2	Clarke 1 Garland 1 Durr 1 Schabort 1	Durr 1
Cambridge Un.	Nov 3	A	4	12	1Ø	0	1+	3		Preen 1 Ø
London Scots.	" 6	H	11	20	1	2	4	0	Mostert 2 Preen 1	Preen
Blackheath	" 24	H	9	0	0	3	0	0	Clarke H Spence Lewis	
London Irish	" 27	H	19	6	2	3	0	2	Preen 2 Wilkinson 2 Garland 1	Durr 2
Newport	Dec 2	A	9	17	1+	2	2+	3	Mostert 2	Garland +
Richmond	" 4	H	3	5	0	1	1	0	Durr	
Aberavon	" 11	A	5	8	1	0	1	1	Jones	Durr
United Services	" 15	A	6	19	0	2	2	3	Lewis Preen	
Cardiff	" 18	A	10	22	2	0	3+	5	Lewis Garland	Durr 2
Coventry	" 27	H	10	7	2	0	1Ø	1	Garland Van Schalkwijk	J C Tregarthen 2
Old Merchant T.	1927 Jan 1	A	6	9	0	2	0	3	Lewis Van Schalkwijk	
Royal Air Force	" 5	H	5	3	1	0	0	1	Wilkinson	Durr
Old Leysians	" 8	H	13	10	2	1	1Ø	2	H Spence Wilkinson Van Schalkwijk Lewis Clarke	Durr 2
Birkenhead Pk.	" 15	A	6	5						
Royal Naval Coll.	" 19	H	19	0	1Ø	5	0	0	Lewis Wilkinson Spence Preen Durr	Spence Ø
Old Alleynians	" 29	A	42	0	6	4	0	0	Lewis 3 Clarke 2 H Spence Garland Preen Morgan Radford	Boyle Radford 4 Schabort
St George's Hos.	Feb 1	N	29	3	4	3	1	0	Lewis 2 Schabort 2 Wilkinson Cameron Durr	Durr 4 +
Bedford	" 5	H	17	3	1	4	0	1	Clarke H Spence Lewis Preen Brown	Boyle
Cambridge Un.	" 9	H	3	3	0	1	1+	0	H Spence	
Devonport Ser.	" 12	A	3	3	0	1	0	1	Smith	
St Thomas's Hos.	" 15	N	22	9	2	4	2Ø	0	Garland 4 Lewis Cameron	Durr 2
Plymouth Alb.	" 19	H	13	6	2	1	0	2	Clarke 2 H Spence	Radford 2
St Mary's Hos	" 24	N	13	0	2	1	0	0	Clarke Lewis Garland	Radford 2
Birkenhead Pk.	" 26	H	0	6	0	0	0	2		
Rosslyn Park	Mar 5	A	3	11	0	1	2+	1	Clarke	
King's College Hos.	" 16	N	10	0	2	0	0	0	Lewis Garland	Durr 2
Coventry	Ap 9	A	3	11	- 1	3++	0		Garland	

PLAYED 34. WON 18. DRAWN 3. LOST 13.

+ Indicates Penalty Goal Ø Indicates Drop Goal

Golf.

THE Monthly Competition Bogey was held on Wednesday, April 6th, at West Kent. Although it was a fine day, the course was very wet, and Cotton did very well to return a card with 1 up.

This was about the smallest turn out we have had, but now that the fine weather has arrived we hope that our numbers will greatly increase.

During the next few months we hope to have several matches, and fixtures are being arranged between Sidcup, Dulwich, Shortlands and Hastings.

There will also be a Competition for a "St. Dunstan's Spoon" under handicap. An entrance fee of 2*s.* 6*d.* will be made, and it is hoped that at least 20 entries will be received. All entrance fees will be sent to St. Dunstan's.

The following are the results of the April Competition :—

W. J. Cotton, 1 up.
L. B. Langmead, 6 down.
E. C. Duffett, 7 down.
S. H. Croot, 10 down.

E. C. DUFFETT, *Hon. Sec.*

Rifle Association.

THE Annual General Meeting was held on Monday, March 21st, 1927, and the following officers were elected for the season 1927–28 :—

President—Herbert French, Esq., C.B.E., M.D.
Captain—Harold E. Harding, M.B.
Hon. Secretary and Treasurer—C. L. Stevens.
Committee—Messrs. R. L. Duchesne, H. Richards, C. B. Williamson, C. E. Gallagher, E. S. St. John, R. W. Whitworth.

Mr. E. C. Gross was appointed Treasurer of a Fund to be opened—to which subscriptions are invited—for the purpose of acquiring six new rifles for the team competing for the Hospital.

Targets are now available every Wednesday, and every opportunity is offered to the novice, as well as to those with some knowledge of rifle shooting to become expert marksmen. Rifles and ammunition are supplied free by the Association to all members of the Clubs' Union.

The Armitage Cup shoot, which was postponed owing to the general strike last year, has been fixed to be shot for on Wednesday, May 25th, 1927, but instead of being shot for in four stages it has been arranged to decide the Competition for the Cup on the one day. The Armitage Cup shoot for 1927 will be shot for on Wednesday's, June 1st, 8th, 15th and 22nd.

The United Hospitals' Challenge Cup, presented by the National Rifle Association, will be shot for on Tuesday, July 12th, 1927.

The United Hospitals' Prize Meeting will take place on Wednesday, June 22nd, 1927.

The Guy's Hospital Prize Meeting will be held on a date to be notified later.

In view of the fact that the Armitage Cup is to be shot for twice this year, it is earnestly requested that as many new members, as well as old, will turn up for practice regularly on Wednesday afternoons, so as to form the material from which a representative team can be chosen to uphold the prestige of Guy's. A list will be found on the Notice Board in the Colonnade to which new and old members are asked to affix their names, and to whom a hearty welcome will be extended.

The Hon. Secretary will be pleased to afford any information that he can, and it is pointed out that vouchers can be obtained from him entitling the holder to a Return Ticket to Brookwood at the reduced rate of 3*s.*, and that members have the use of the club premises of the London and Middlesex Rifle Association, where refreshments can be obtained at reasonable prices.

C. L. STEVENS, *Hon. Sec.*

Tennis.

Guy's 2nd VI v. Bart's 2nd VI.

THIS match was played at Honor Oak on Wednesday, April 27th, and resulted in a good win for the Hospital. Booker and Peregrine made a good first pair and both played a steady game. Pearson showed good form his service being particularly attractive and he should be a useful addition to the team Lomax and Ellis were inclined to be erratic and it seemed they were endeavouring to hit rather than watch the ball. Harley has not yet got into form and lacks practice.

Booker and Peregrine—
Beat Finn and George 6–0, 6–1.
Beat Grace and Gonin 6–2, 6–2.
Beat Fisher and Bennett 6–1, 6–1.

Pearson and Lomax—
Beat Finn and George 7–5, 6–0.
Beat Grace and Gonin 6–4, 6–2.
Beat Fisher and Bennett 6–2, 6–2.

Ellis and Harley—
Beat Finn and George 6–2, 6–4.
Beat Grace and Gonin 6–2, 6–0.
Beat Fisher and Bennett 6–2, 6–2.

Guy's 2nd VI v. Old Citizens 1st VI.

THE Hospital were again successful in this match, played at Honor Oak on Saturday, April 30th.

Pearson and Ellis combined well and won all their matches. They should make a useful combination with more practice together.

Pearson and Ellis—
Beat 1st Pair 3–6, 6–0, 6–3.
Beat 2nd Pair 6–4, 6–1.
Beat 3rd Pair 6–4, 6–1.

Lomax and Booker—
Beat 1st Pair 6–4, 8–6.
Beat 2nd Pair 6–0, 6–1.
Beat 3rd Pair 6–2, 6–4.

Kurty and Harley—
Lost to 1st Pair 1–6, 4–6.
Beat 2nd Pair 2–6, 6–4, 6–4.
Lost to 3rd Pair 1–6, 6–4, 1–6.

Lane-Washbourn Cup

A list has been posted in the Colonnade. Entries will close on Monday, May 9th, at 5 p.m.

G. M. HOUSDEN, *Hon. Sec.*

Cricket.

Guy's v. Bromley.

THE opening match of the season versus Bromley, at Honor Oak Park on Saturday, April 30th, ended in a draw, slightly in favour of the Hospital.

The weather was glorious for the first match, the wicket being, however, distinctly hard and dry. Bromley batted first against the bowling of Van Schakwijk and Durr. Only one of the Bromley batsmen, W. D. Boothman, was able to cope really effectively with the bowling. His innings of 102 was almost faultless, and the ease with which he dealt with the succession of bowlers put on against him was a contrast to the other members of his side. Bromley scored a total of 213 all out and the Hospital were left with under two hours to get the runs. We started badly, Pye-Smith being beaten by the second ball of the innings. Garland and Spence, however, put up a stand, the latter batting splendidly for his 85. Curtis, when he had settled down, hit well for his 50, and while he and Spence were together there seemed hope that they might knock the runs off between them.

By 7.30, the time for drawing stumps, about 30 runs were required to win, but the anxiety of the remaining batsmen to bring off a spectacular win, combined with the steady bowling of our opponents, dashed our hopes during the remaining 15 minutes, Guy's final score being 202 for 7.

Scores—Bromley, 213 (W. B. Boothman 102); Guy's, 202 for 7.

Guy's

E. J. Pye-Smith, b. Moore	0
T. O. Garland, c. ——, b. Stone	28
H. Spence, b. Stone	85
A. H. Curtis, b. Stone	50
G. J. Clarke, b. Moore	15
J. Durr, b. Stone	4
J. G. Van Schalkwijk, not out	6
J. C. Hutchinson, b. Stone	1
Extras	13
Total (for 7 wkts.)	202

W. J. Cotton, R. Catchpole and N. S. Plummer did not bat.

Bowling—J. G. Van Schalkwijk, 6 for 50; J. Durr, 2 for 63; A. H. Curtis, 2 for 37.

Guy's Hospital Innominate Society.

Brooklands' Speed Hill Climbing Competitions.

THE first run of the season will be held on the afternoon of Wednesday, May 25th. The Society cordially invite any member of the Hospital—student, staff or family—to attend this opening meeting. The Society will proceed to Brooklands' Race Track, where speed and hill climbing tests will be held. These events will be open to all who possess a motor car or motor cycle. And it is hoped that a large number will take this opportunity of racing on the Brookland's track. Details of the various Competitions will be posted later in the Colonnade.

All desirous of attending this meeting, or of taking part in the Competitions, should send in their names *as soon as possible* to T. D. T. Bracklehurst, Guy's Hospital, S.E.1.

Birth.

CAMPBELL—On April 9th, 1927, at a Nursing Home, to Dr. and Mrs. J. M. H. Campbell, a daughter.

Marriage.

VERMOOTEN—LEIBBRANDT—On April 9th, 1927, at the Presbyterian Church, Pretoria, Ian Reginald Vermooten to Lucelle, eldest daughter of Mr. and Mrs. P. M. Leibbrandt, of Arcadia, Pretoria.

EDS. { P.F.S. C.
G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *May 21st, 1927.* *Number 1013*

PASSIM

IT has been asserted that the days of brilliant conversation and of inspiring orators have passed, owing to newspapers and wireless telephony, which fact is perhaps a blessing, since it is a decided advantage to be able to turn off the tap of garrulity at will, or to be able to cast a dreary newspaper into the waste paper basket, a point that is of some consolation to leader writers who realise that the infliction of their words is not compulsory. It is, however, a matter of some interest to speculate on the influence that the modern newspaper has on the populace, and one wonders whether in all matters they are as ill informed (except in occasional articles written by qualified medical men) as in medical matters.

The popular press is increasingly devoting its attention to subjects dealing with medicine which is, perhaps, only a symptom of the growing influence of the profession in the State and as the Great Public is always attracted by something in the nature of a horror —and Doctors are always associated with either knives or nauseating draughts, in spite of " Tabloids " and anæsthetics—the daily journals turn this to good account, which seems to us not altogether a good thing, particularly as it results in the most confusing and embarrassing questions from the more intelligent patients, who enquire eagerly about one's theories of the function of the appendix and are well acquainted with the vitamine content of Norwegian sardines in oil. Quite recently we were informed that we were very young and perhaps influenced by the natural conservatism of the profession, but that it was certain that a raw cabbage served with olive oil was the ideal breakfast—this being an idea elaborated from a series of newspaper articles and the researches into the literature on the alimentary tract and diet that it stimulated.

That the fundamental facts of health preservation should be broadcast seems good, but the difficulty is to be certain of the fundamentals. The British Empire may yet be ruled by a constellation of nut-eating sandal-wearers!

To write positively about the mechanism and care of a motor car is easily possible, but one man may brush his teeth daily and lose them all at thirty years of age, while another will have a perfect set at fifty with never the application of a brush.

IT is with very much sorrow that we record the death, after an operation recently, of Mr. J. H. Barend, a student at this Hospital, and we offer to his relatives and friends our sincere sympathy.

Mr. Barend was very severely wounded while serving in the Navy during the Great War, which interfered considerably with his subsequent studies. He was, in spite of his handicaps, always cheerful, with much of the charm that is characteristic of naval men. He will be missed at the Hospital.

THE Guy's Hospital Ladies' Association are holding a Garden Fête in the grounds of the Hospital on Thursday, June 9th, from 2.30 to 9 p.m., which will be opened by the Lady Mayoress at 3 p.m.

This promises to be a very enticing party with such attractions as a White Elephant Stall and Dancing in the Nurses' Home, and much more.

The support of all interested in the Hospital is particularly requested to make this Fête a financial success.

Tickets may be obtained on application to the Appeal Office, Guy's Hospital, S.E.1, or from the Hon. Secretary, G.H.L.A., 73, Wimpole Street, W.1.

WE offer our congratulations to Mr. R. F. Prichard and Mr. C. I. Walmsley, who have been awarded the Annual Prize and Certificate, respectively, for Operative Dental Surgery. Also to Mr. C. S. Henderson, who has won the Third Year Prize in Dental Subjects.

MR. C. W. MARSHALL has been elected President of the Residents, and Mr. E. H. Roche Vice-President.

THE removal of the Out-Patients Surgical X-ray Department to the region of the Colonnade, until the new Out-Patient Department is constructed, has added a very tedious quota of journeys to the work of Out-Patient Officers and we wonder whether this change is entirely unavoidable. If that be so we can only hope that some benevolent friend of harassed and over-worked Out-Patient Officers will provide a small two seater motor car to be housed outside the Front Surgery and used only by O.P.O.'s for trips to the distant Out-Patient X-ray Department.

Obituary.

Ernest Henry Starling, C.M.G., M.D., F.R.C.P., F.R.S.

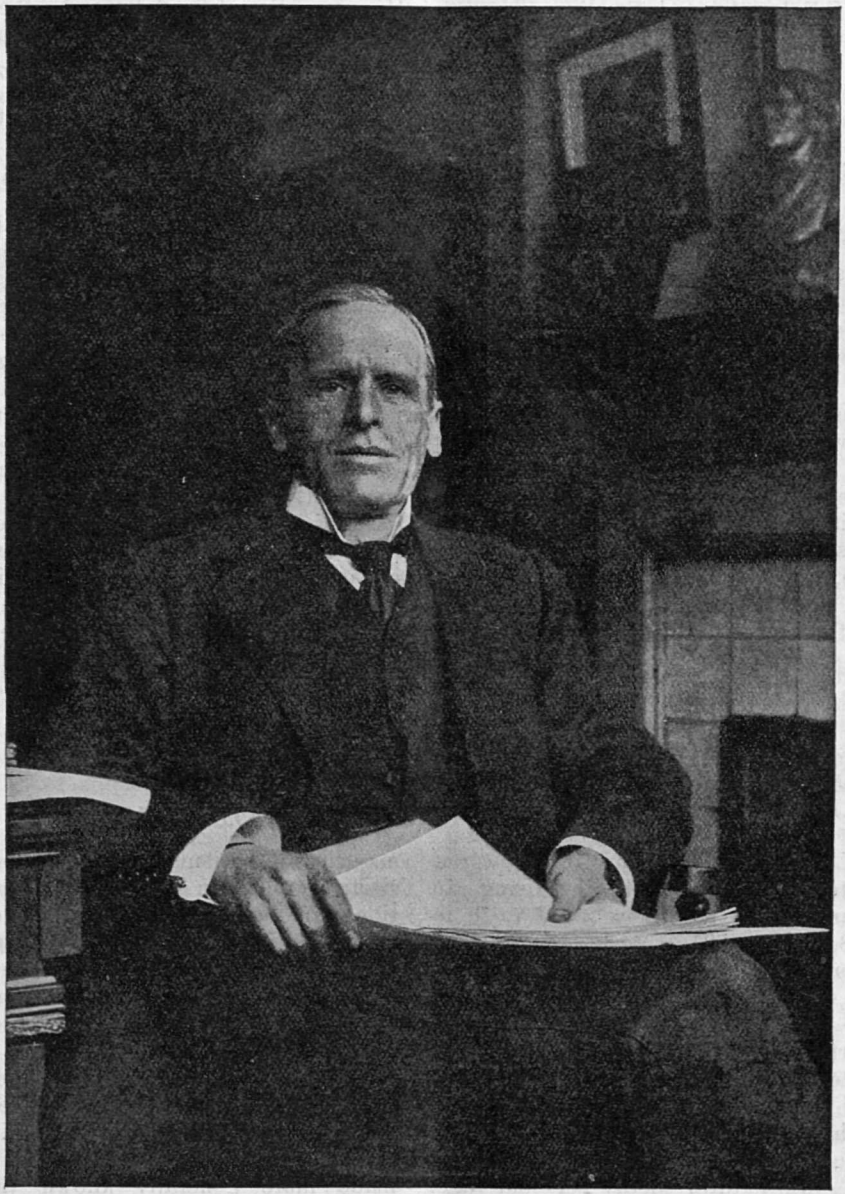
IN the last decade of the Nineteenth Century, there were at Guy's, three students, all destined to become famous physiologists, known all over the world. They were E. H Starling, F. Gowland Hopkins, and J. B. Leathes.

The eldest of them, E. H. Starling, died early this month on board ship as she was entering Kingston Harbour, Jamaica. It was only possible just to mention this in the last issue of the GAZETTE, for, when the news came, the number was going to press. Since then many obituary notices of Starling have appeared notably in "The Times," "The Morning Post," and "The British Medical Journal." They are among the best obituary notices ever written of anyone, and it would be impossible to indicate more decisively than they do the reasons for believing that Starling was a genius to whom science will be under a debt for all time. But it would be a sad want of proper feeling if the GAZETTE did not say something on the passing away of such a remarkable child of Guy's.

E. H. Starling came to us in 1882, entering first for the Preliminary Scientific Classes only, as was the custom in those days. He won many prizes, obtained the Treasurer's Gold Medal for Medicine and was proxime accessit for the Treasurer's Gold Medal for Surgery. He also gained many high distinctions at the University of London. He was my house-physician in 1889; during the time he held this office he caught diphtheria from a patient. The attack was very serious, indeed it was doubtful whether he would recover, but he struggled through, although antitoxin had not then been discovered. No one could have wanted a better house physician, he was desperately keen, and learnt both the art and the science of medicine with astonishing rapidity. The members of the staff with whom he worked gained as much from him as he did from them.

Starling had a passionate desire to find out; this was combined with imagination and with excellent judgment. In addition, he was an enthusiast who was determined to get on with whatever he had in hand; how he would work, difficulties only increased his energy. At one time he wished to devote himself to medicine, the immediate results of discoveries in that field appealed to him, and he enjoyed dealing with human beings. He had a fine clinical instinct and he was an artist, fully appreciating the art of medicine. Many times has he discoursed as to what a wonderful scientific career medicine might be, but in his day posts such as would have suited him, and at the same time given him a living, did not exist. Then he nearly became a Professor of Pathology. But Wooldridge, who was Assistant Physician to Guy's Hospital and Lecturer on Physiology, and who had always had an influence upon Starling, died on June 6th, 1889, and so it came about that Starling, after finishing his

clinical work, passed into the Physiological Department at Guy's. At once his presence was felt. As is recorded in the obituary notice of him in "The British Medical Journal," the Department was rebuilt. Original work was



By kind permission of the B. M. J.

E. H. STARLING.

turned out, anyone strolling into the laboratory would find Starling, Hopkins, Bayliss and several others all hard at work. The Department became a living thing of great vitality. Starling's lectures were admirable, not because he was a great orator, he was not, but he spoke slowly and distinctly, he was perfectly clear, gradually unfolding his subject, premise by premise, so that the listener, enthralled by the lecturer's earnestness, felt that he had really learnt something. Many of his physiological lectures were published in the GAZETTE. In 1892 his "Elements of Human Physiology" appeared, it was reviewed at length in the GAZETTE the reviewer saying that "it may cer-

tainly be ranked as original." So it was and so was the Author, that was one reason of his greatness, especially as his originality was almost certain to be correct. Unfortunately for Guy's, Sir Edward Sharpey-Schafer left the Professorship at University College in 1899, to take up that in Edinburgh, and Starling was appointed to succeed him. The GAZETTE at the time said: "We congratulate him on his selection for the most coverted physiological appointment in London, but we can only regret the loss to Guy's of one of its best known men and most original thinkers."

It is outside the scope of this notice to tell of his discoveries; "The Times," which placed him with Harvey, and Prof. C. J. Martin in "The British Medical Journal" have done this already. We at Guy's, however, pick him up again, for when the war broke out, Starling, as ever full of enthusiasm, was determined to do something for his country. At first he thought he would take up a post in a Military Hospital, so he came round with me to relearn his medicine. Although he had done absolutely no clinical medicine for about five-and-twenty years, the atmosphere of it permeated him at once, his skill as a clinician returned immediately and he went to take charge of patients in the Herbert Hospital. Fortunately his abilities were soon used in directions in which they were of even more value, for he became Director of Research, especially in connection with defence against poison gases, and in various capacities he gave invaluable advice to the Government on the question of the food supply of the Nation. He was Chairman of the Royal Society Food (War) Committee, and Honorary Scientific Advisor to the Ministry of Food. Few books are more fascinating than his "The Feeding of Nations."

Had he lived he would once more have come among us at this Hospital, he had promised to write an article on the kidney for the forthcoming number of the "Guy's Hospital Reports," which will be published in connection with the centenary of the announcement of Bright's discovery, and he was going to attend the lecture that is to be given in July by Prof. W. S. Thayer, when Starling would have received from his old School, a medal struck in memory of Bright and presented to a select few who have worked to especial purpose in unravelling the functions of the kidneys.

Starling was a man whose company was a treat, his conversation was alive and he vitalised his companions. He got pleasure out of life, a fine warm day, beautiful scenery, good music, a good walk, a steep climb, a brisk game at lawn tennis, a good dinner, were all joy to him. Now that he is gone there is less sunshine for those who knew him.

W. HALE WHITE.

Carcinoma of the Stomach.

Clinical Lecture by R. P. ROWLANDS, O.B.E., M.S.

GENTLEMEN,—The deaths from cancer of the stomach appear to be increasing. In England and Wales there were 7,078 in 1919, and 8,135 in 1921. Very few of these patients ever come to the surgeon; many do not see a physician or even their general practitioner until it is too late to operate. This is partly because gastric cancer is frequently a terminal disease in old people, for more die of this condition between the ages of 60 and 70 than in any other decade, so that the early symptoms are often overlooked or thought to indicate the natural decay of old age. Even when an early and correct diagnosis occasionally is made in these old people a radical operation is often considered to be too formidable. There is also a prevalent opinion among the public that cancer of the stomach is necessarily fatal, and that no operation can either cure or afford much relief. The majority of patients who see a consulting physician or surgeon come so late that no operation can be performed or the difficulty and the mortality of operation are very great; at the best, in these late cases, the prolongation of life is short, with the natural result that the public get a bad impression of the operation.

Better education of the public and of the rank and file of the medical profession, leading to earlier diagnosis and operative treatment, would bring far better results. It should be made more generally known that both the immediate and the ultimate results of early operation are good; the immediate mortality should not be more than 10 per cent. and at least one quarter of the patients should be alive and well five years after the operation. These operative results are satisfactory for a disease which has a 100 per cent. mortality

under medical treatment. At present, out of ten cases which reach me, resection is only possible in two and gastro-jejunostomy for the relief of obstruction in three, the remainder being inoperable.

Many cancers of the stomach could be prevented by earlier and better treatment of chronic gastric ulcer, which is perhaps the main precursor of gastric cancer. Sherren and Moynihan maintain that at least 50 per cent. of cancers of the stomach arise in chronic gastric ulcers and find direct microscopic evidence that cancer started in an ulcer in one-quarter of the specimens of cancer removed at operation. Moreover, one-tenth (Moynihan) to one-twentieth (Sherren) of supposed chronic gastric ulcers, removed by them show evidence of early cancer. Pauchet contends that as many as 75 per cent. of cancers of the stomach arise in simple ulcers. Others deny any direct relationship between gastric ulcer and gastric cancer, but it is significant that cancer attacks just those parts of the stomach which are subject to ulcers and that the long clinical history of chronic recurring gastric ulcer is obtainable in the majority of cases of cancer of the stomach. In this connection MacCarty's view is important. He asks the practical question:

"Is cancer often associated with chronic gastric ulcer? From an experience of more than 1,400 gastric specimens I can state that the association is so frequent that, if I had a chronic gastric ulcer, I should always consider the possibility of cancer being present and I know of no clinical or laboratory methods by which the differential clinical diagnosis can be made. From actual experience also I know that chronic gastric ulcers with a diameter greater that 2·5 cm. are cancerous. I do not know whether the cancer or the ulcer was primary, but I do know that I would not temporise with the chronic gastric ulcer."

Symptoms.

Cancer of the stomach should be suspected in any patient, especially over 30 years of age who suffers from obstinate dyspepsia with anorexia, wasting anæmia, pain, vomiting (especially of coffee grounds), and achlorhydria. It should be remembered, however, that not more than 50 per cent. of early cancers of the stomach show achlorhydria, and that in over 25 per cent. free hydrochloric acid is either normal or excessive; but definite anorexia and achlorhydria are very important indications of cancer of the stomach.

When cancer of the stomach is suspected it is of the greatest importance to settle the diagnosis without delay and, with this object, every useful examination should at once be made; a fortnight is ample time for every investigation to be completed. The most reliable help is afforded by X-ray examinations by an expert.

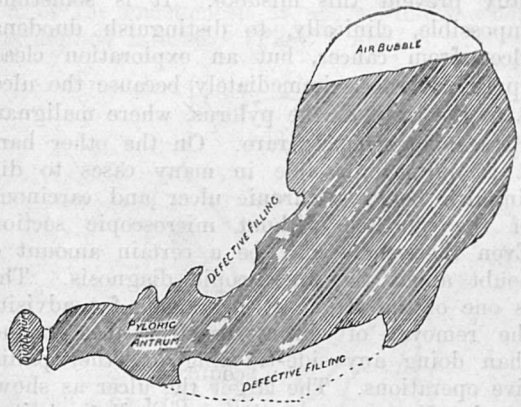


FIG. 1.—Copy of radiogram of stomach taken by Dr. Lindsay Locke. This carcinoma was suspended and proved to be too extensive for resection.

Persistent delay, defective filling, and distortion of the shadow are practically conclusive. (See Fig. 1). Carman maintains that he can make a correct diagnosis by X-rays in over 96 per cent. of the cases submitted to him, but I have not yet found X-ray reports so accurate as this. Further, Carman and MacCarty state that if an ulcer has a crater of over 2·5 cm. it is almost certain to be malignant. This is a valuable observation, but it is not entirely reliable, for I have excised several larger chronic gastric ulcers which were proved by subsequent microscopic examination to be innocent. In doubtful cases it is important to take a Wasserman reaction in order to exclude syphilis of the stomach, although this is a very rare disease. Gastric analysis is not of the same value as radiography for, as already said, achlorhydria may be absent in the early stages which are the only hopeful and important ones from a surgical point of view. Hence the method has been abandoned in some surgical clinics as superfluous or misleading; moreover, free HCl may be greatly diminished in pernicious anæmia, chronic pancreatitis, cholecystitis and some other diseases.

There is considerable danger of mistaking pernicious anæmia for cancer of the stomach, but the characteristic changes in the blood in the former condition should prevent this mistake.

Carcinoma of the body of the pancreas presents difficulties for this condition, unlike the same disease in the head of the pancreas, does not cause jaundice. The patient has much pain, wastes rapidly and is anæmic. Negative X-ray examinations and the absence of blood in the gastric juice or in the fæces should generally prevent this mistake. It is sometimes impossible, clinically, to distinguish duodenal ulcer from cancer, but an exploration clears up the diagnosis immediately because the ulcer is to the right of the pylorus, where malignant disease is extremely rare. On the other hand it is quite impossible in many cases to distinguish between chronic ulcer and carcinoma of the stomach without microscopic section. Even then there may be a certain amount of doubt about the microscopic diagnosis. This is one of the strongest arguments for advising the removal of chronic gastric ulcer, rather than doing any side-tracking or other palliative operations. The larger the ulcer as shown on the X-ray screen the more adherent it is and, the harder it is, the more likely is it to be a cancer. Considerable enlargement and hardness of the draining lymphatic glands is very suggestive of cancer. But you cannot go beyond that.

I remember 12 years ago mistaking an innocent tumour of the stomach for cancer. There was a submucous pedunculated tumour of the stomach, with pressure ulceration of the tumour and severe hæmatemesis and malæna, which nearly killed the patient. When he was still very ill in the reaction after the bleeding I performed partial gastrectomy thinking I was dealing with a sarcoma of the stomach. The patient died of shock and exhaustion. Eleven years later I found a similar tumour in an old man, but my previous experience enabled me to recognise the growth as innocent and to make a simple resection, followed by a complete cure. Similarly a nævus or even an adenoma of the stomach may be mistaken for carcinoma. An interesting example of a large nævus of the stomach is reported from the Mayo Clinic; a doctor was told that he had an irremovable cancer of the stomach, but he insisted upon an exploration, which showed the real nature of the case and resulted in a complete cure.

If ever you feel a very moveable lump in the epigastrium and there is a history of severe hæmatemesis with colic, you can be fairly sure that the lump is an innocent tumour of the stomach.

Indications for Operation.

When all available methods of examination have been exhausted without settling the diagnosis, in doubtful cases an exploration of the abdomen is often necessary in its hopeful stages, and this exploration should be resorted to without delay. When cancer is excluded by exploration some other disease is generally found, such as peptic ulcer or cholelithiasis, which can be best treated surgically. But negative explorations for late cases are to be avoided, whenever possible, for they carry a high mortality, chiefly from pulmonary complications. The following points indicate that an exploration is useless.

1. *Bad general condition.*—When the general condition of the patient is so poor that he cannot be expected to stand a major operation, such as partial gastrectomy, it is a pity to submit him to an exploration, but his health may be greatly improved by careful dieting, rest, gastric lavage and sometimes by blood transfusion before operation. In some cases a preliminary short-circuit for pyloric obstruction has the same beneficial effect, allowing a resection to be carried out at a later date. (See Case 2).

2. *Evidence of secondary growths.*—It is useless to explore a patient when hard enlarged glands are felt, especially at the root of the neck, or when secondary growths are felt in the pelvic peritoneum on rectal or vaginal examination. Any nodules at the umbilicus, in the liver, or anywhere in the abdomen, especially with ascites, are strong contradictions to exploration.

3. *Size, position, and fixation of the growth.*—A palpable tumour is by no means a contra-indication to resection, for even a simple gastric ulcer may sometimes be felt in a thin abdomen, but the size and position of the tumour are most important for, if it is large, and particularly if it extends upwards under the left costal margin or starts in the cardiac part of the stomach, resection is not likely to be practicable. Fixation of the tumour is also very important for, if it cannot be moved from above downwards and from side to side, resection is impossible. Accurate radiographic examinations give valuable help by indicating the site, extent and mobility of the growth as well as the size and capacity of the healthy part of the stomach.

Operation.

This commences as an exploration to establish or complete the diagnosis and to determine the proper treatment. A long paramedian incision is made in the epigastrium,

either to the right or the left of the middle line, according to the position of the growth. The incision extends from the costal angle to below the umbilicus. The growth, glands and peritoneum are carefully examined to see if resection is practicable. If the liver and the peritoneum are free of secondary growths, everything depends on the extent and fixation of the primary growth and the presence of secondary glands, especially about the head of the pancreas and the cœliac axis. If the primary growth extends along the lesser curvature nearly to the œsophagus, partial gastrectomy will be of no avail and, in my opinion, complete gastrectomy is hardly ever worth doing, for it carries a very high mortality and is generally followed by rapid recurrence. Those who survive it for any length of time without recurrence develop an intractable form of anæmia simulating Addison's (pernicious) anæmia. Considerable invasion of the pancreas is generally a contra-indication to resection; involvement of the transverse colon or its mesentery is not so serious, for these parts can be resected with justifiable additional risk.

Partial Gastrectomy.

Choice of Method.

This depends upon the site and extent of the growth. In many cases it is necessary to remove the pylorus and from one-quarter to one-half of the stomach. After extensive resections direct union of the stomach and duodenum, after Billroth's first method, is impracticable without undue tension. Therefore the duodenum is closed and the side of the jejunum is anastomised directly to the cardiac remainder, after Polya's method. It is better to place the loop of jejunum in front of the transverse colon, after Balfour's method, for if recurrence takes place, as it often does about the pancreas and transverse mesocolon, obstruction of the anastomosis is not so likely when this method is used. (Figs. 2 and 4).

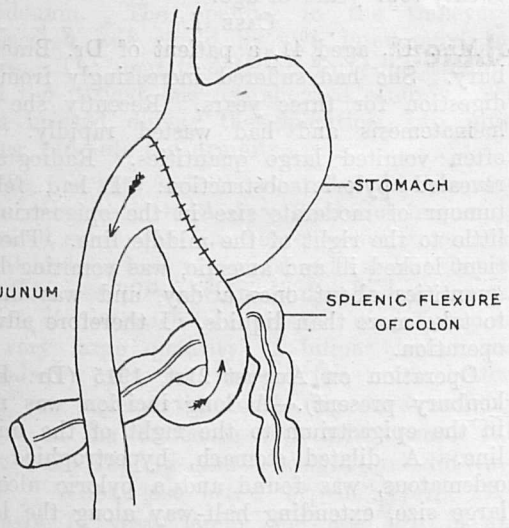


FIG. 2.—Partial Gastrectomy. The jejunum is brought up in front of the spenic flexure of the colon, and joined without tension to the cut end of the Stomach. The distance from the duodeno-jejunal flexure to the anastomosis is usually about four or five inches. Vomiting is rare with such a loop.

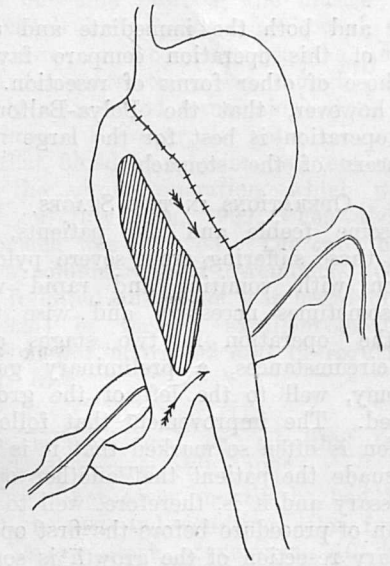


FIG. 3.—Partial Gastrectomy, with another method of union, a long loop of jejunum is used, and differently applied; an antero anastomosis is made to prevent "Vicious circle." This is not such a good method.

When the primary growth is small, Billroth's first method is an excellent one, especially if it is carried out after Schoemaker and W. J. Mayo's plan. Mayo mobilises the lesser curvature, removes the whole of the gastro-hepatic omentum with its contained glands and a considerable part of the lesser curvature of the stomach, along which the growth so often spreads. He also points out that the intramural spread rarely extends more than 3 cm. from the edge of the primary growth and that it is not necessary to resect the stomach so widely, as has so often been done, provided that the lympathic vessels and glands are extensively removed. The wound in the stomach is sutured along the lesser curvature, so that the diameter of the opening left is not appreciably larger than that of the duodenum. With modern methods of suture the danger of leakage at the "angle" is negligible.

When the growth is in the mid-gastric area and is not too extensive, sleeve resection, with wide removal of the lymphatic glands, is in-

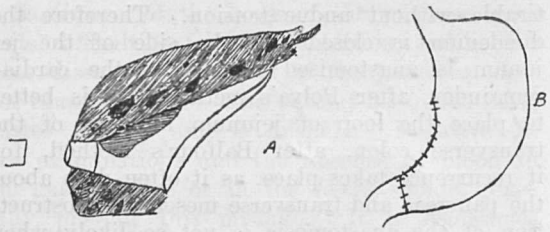


FIG. 4.—Billroth No. 1. modified by Schoemaker (W. J. Mayo). A, Part removed. B, Method of union.

dicated and both the immediate and ultimate results of this operation compare favourably with those of other forms of resection. I believe, however, that the Polya-Balfour-Moynihan operation is best for the large majority of cancers of the stomach.

Operations in two Stages.

In some feeble and old patients, especially in those suffering from severe pyloric obstruction with vomiting and rapid wasting, it is sometimes necessary and wise to perform the operation in two stages and, in these circumstances, a preliminary gastro-jejunostomy, well to the left of the growth, is indicated. The improvement that follows this operation is often so marked that it is difficult to persuade the patient that another operation is necessary and it is, therefore, well to explain the plan of procedure before the first operation. Secondary resection of the growth is sometimes made somewhat more difficult by the previous gastro-jejunostomy, which limits the mobility of the stomach and sometimes makes it difficult to divide the latter far enough away from the growth. When this has been removed, the opening in the duodenum and stomach are closed and the anatomy of the parts is like that of Billroth's second method, which is rarely performed as a primary operation nowadays because it is unnecessarily complicated and prolonged when compared with the Polya-Balfour method.

Palliative Operations.

When the growth is irremovable, and obstruction to the exit of food from the stomach has developed or is impending, some operation is indicated to relieve the suffering of the severe pain and incessant vomiting which otherwise is inevitable.

Gastro-jejunostomy, although it does not prolong life more than about six months on an average, is still a humane operation in these cases, when it can be performed without too much difficulty or tension. But the indications for this operation have become less frequent of recent years owing to the more frequent choice of partial gastrectomy in later cases. This operation, although it may not cure owing to glandular involvement, gives a greater prolongation of life and more comfort than does gastro-jejunostomy. For this reason a short-circuit is chosen rarely except for very late cases, when a posterior operation is rarely possible and the short-circuiting operation has to be performed high up and far to the left, where kinking and vomiting are likely to follow. Therefore, I think it should be a rule to add entro-anastomosis to prevent vomiting in these cases.

Jejunostomy.

For some very late cases of growth of the stomach, jejunostomy is better than gastro-jejunostomy, because it is more easy to perform, less risky and gives greater prolongation of life with more comfort.

The following four cases may serve to illustrate some of the points of this lecture. They afford striking contrasts: the first, an early case operated on with complete success, the patient being well eleven and a half years after partial gastrectomy; the second, a late case with severe anæmia, calling for preliminary short-circuit and secondary resection; and the third and fourth are recent cases, the last being remarkable because the patient is only twenty-four years of age.

Case I.

Mrs. E., aged 41, a patient of Dr. Brackenbury. She had suffered increasingly from indigestion for three years. Recently she had hæmatemesis and had wasted rapidly. She often vomited large quantities. Radiography revealed pyloric obstruction. I had felt a tumour of moderate size in the epigastrium a little to the right of the middle line. The patient looked ill and anæmic, was vomiting large quantities about once a day, and was unable to take more than liquids. I therefore advised operation.

Operation on August 21st, 1915 (Dr. Brackenbury present).—A long incision was made in the epigastrium to the right of the middle line. A dilated stomach, hypertrophied and œdematous, was found and a pyloric ulcer of large size, extending half-way along the lesser curvature from the pylorus around which it formed a ring which was hard and felt like carcinoma. As the stomach was particularly movable and there were no growths in the liver, pelvic peritoneum or glands, I decided to resect the diseased part and this was done without delay. The gastric artery was double

ligatured and divided, the left gastro-epiploic also, then the great omentum close to the transverse colon and the right gastro-epiploic and pyloric arteries. The duodenum was crushed one inch beyond the pylorus and sealed with a running suture of linen thread and then invaginated by two purse-strings of the same material. A loop of jejunum was brought up through the transverse mesocolon and sewn to the back wall of the stomach along a selected line, a little on the cardiac side of the middle of the stomach. Thick black thread was used. The stomach was divided near the line already mentioned between two clamps so that no leakage occurred. An opening the same size as the one in the stomach was made in the jejunum and an anastomosis made as in gastro-jejunostomy, black thread being used throughout. The sewing of the jejunum to the stomach before the growth was removed greatly facilitated the operation, for the growth was useful as a tractor and later on the attachment to the jejunum prevented retraction of the stomach during the insertion of deep sutures. The opening in the jejunum began four inches from the end of the duodenum and, by starting it here, there was no tension upon the first part of the jejunum and duodenum. Only two layers of sutures were used for anastomosis. The great omentum was not removed, but drawn up over the anastomosis and the stump of the duodenum. The opening in the transverse mesocolon was closed by two interrupted sutures. The operation lasted forty-five minutes and the patient was not shocked after it. She was infused during the operation, two pints being run into the armpits.

She was very well the next day, but vomited once or twice. On August 23rd she frequently vomited small quantities of offensive green material and, as half a pint of sodium bicarbonate solution was given without affording any great relief, the stomach was washed out at 5 p.m. A very large quantity of bilious liquid was withdrawn and the patient felt much better. She was up on the tenth day, and walking about on the thirteenth and eating almost full diet. She rapidly gained weight and did very well. When last heard of, in April, 1927 (nearly 12 years later), she was still in excellent health.

Case II.

A man, aged 64, had had gastric symptoms for years with some malæna. When admitted to Guy's Hospital he was thin and very anæmic. He was sent up with the diagnosis of duodenal ulcer, but the diagnosis in hospital was carcinoma of the pylorus, with obstruction.

Operation on May 15th, 1922.—Dr. E. A. Scott, the anæsthetist, considered that he would not stand a long anæsthetic and operation owing to his anæmic and bad condition. I therefore performed posterior gastro-jejunostomy well away from a definite pyloric carcinoma, the size of a Tangarine orange, completely encircling the pylorus, ulcerated, hard and at one side piercing the muscle wall of the stomach and showing peritoneal nodules. There were no secondary growths anywhere, and partial gastrectomy was thought advisable (possibly after blood transfusion) three or four weeks later. However, the patient improved so much that blood transfusion was not necessary before the second operation, which was performed on July 10th, 1922, when about half the stomach was removed. The growth proved to be a columnar-celled carcinoma. Good recovery followed and when last heard of (January, 1925) he was in excellent health, less anæmic, better nourished and in regular work, cleaning cars.

Case III.

P.H., a man aged 53, admitted to Guy's Hospital, February 17th, 1927.

History.—For seven months he had had discomfort, nausea and vomiting after food. He had a severe attack of vomiting 10 days ago and this had continued once or twice a day ever since. He had been very constipated. Radiograph by Mr. Redding showed "annular defect in the pyloric portion of the stomach quite localised, strongly indicative of neoplasm."

The patient was losing flesh rapidly. He had suffered from chronic tuberculosis of the glands of the neck since childhood and these had broken down and were discharging again. When he was admitted into the Hospital his teeth were septic and it took some time to prepare him for the operation. His blood was examined and belonged to group 4.

Operation, March 3rd, 1927.—Right paramedian epigastric incision. A large growth was found occupying nearly half the stomach and extending to within 2ins. of the cardiac orifice, the glands were enlarged in the omenta and also below and behind the pyloric segment, but the stomach was fairly movable and there were no secondary growths in the liver or pelvic peritonium. Therefore partial gastrectomy was performed, more than two thirds of the stomach being removed with considerable difficulty and an anatomosis was made after the Polya-Balfour-Moynihan method.

The patient did very well and was able to leave the Hospital on the 20th March, less than three weeks after the operation, he was then taking full diet and was rapidly gaining weight. He was shown at the lecture on April 8th, still doing well.

CASE IV.

Edwin O., aged 23, admitted April 6th, 1926, for abdominal pains.

History.—About Christmas, 1925, he had acute pains about the navel accompanied by much vomiting. On the morning of April 6th, another acute attack developed and the pain passed from the navel downwards to the right iliac fossa, where tenderness and rigidity were noticed; two days later a congested adherent appendix was removed through a grid incision. A few days later there was a profuse hæmatemesis, but radiographic examination did not give any evidence of gastric or duodenal ulcer, only some hypotonus of the stomach.

The patient was discharged on April 30th, and after a stay at a convalescent home he attended Surgical Out-Patients on several occasions, up to July, 1926, complaining of some pain in the right hypochondrium, which was relieved by mist. gent. et sodæ.

April, 1927, he came back to Out-Patients for pain in the epigastrium, anorexia and vomiting and he was re-admitted on April 20th. Dr. Ryffel found hypochlorhydria with evidence of some delay in emptying, no blood. Dr. Redding reported moderate ptosis of the stomach with hypotonus, dilatation of pyloric antrum, pyloric canal elongated and constricted, large gastric residue.

Diagnosis.—Prepyloric ulcer with stenosis.

Operation on the 21st of April, 1927.—A large growth found occupying the greater part of the pyloric one-third of the stomach, with secondary glands in lesser and greater omenta and the head of the pancreas, but no palpable deposits in peritoneum or liver. The growth and the glands were removed with some difficulty, the jejunum being afterwards joined to the small cardiac remainder of the stomach after the Polya-Balfour-Moynihan method. The patient did well and was enjoying full diet and walking about the ward a fortnight later.

The section showed a colloid columnar-celled carcinoma.

REFERENCES

Registrar-General's Report, 1921.

Sherren, J.: *Lancet*, 1920, i, 691.

Moynihan, Sir B.: *British Medical Journal*, 1920, ii, 100.

Pauchet, V.: *Presse Médicale*, 1920, November 6th, p. 193.

MacCarty, W. C.: *Collected Papers of the Mayo Clinic*, 1922, xiv, 95.

Mayo, C. H.: *Ann. Surg.*, 1919, lxx, 237; and *Collected Papers of the Mayo Clinic*, 1919, xi, 41.

Mayo, W. J.: *Collected Papers of the Mayo Clinic*, 1922, xiv, 84.

Judd, E. S. and Lyons, J. H.: *Collected Papers of the Mayo Clinic*, 1922, xiv, 69.

Papers by Guy's Men.

Geoffrey Marshall, M.D. Uræmia. *Clin. Jour.*, 1927, lvi, 193.

Arthur F. Hurst, M.D., F.R.C.P. An Address on the Constitutional Factor in Disease. *Brit. Med. Jour.*, i, 1927, 823, 866.

V. E. Lloyd, M.C., M.B., B.S. Sub-Calcanean Spurs in Gonorrhœa. *Brit. Jour. Ven. Dis.*, 1927, iii, 122.

N. Mutch, M.D., and J. Mutch. B. Fallax in Chronic Arthritis. *Lancet*, i, 1927, 1,021.

W. W. Payne, M.B., B.S. The Biochemical Aspect of Nephritis. *Jour. Clin. Res.*, 1907, xiii, 37.

A. Ralph Thompson, Ch.M., F.R.C.S. Pyonephrosis: Incision or Excision of the Kidney? *Medical World*, Vol. XXVI, May 13th, 1927, 190.

Change of Address.

John R. R. Polloch, Wilderose, Exton, Topham, Devon.

Rodney G. Swiss, L.D.S., R.C.S.(Eng.), Easton House, High Wycombe, Bucks.

W. A. Young, 3, College Road, Singapore.

Surgeon-Comdr. H. L. Peregrine to Royal Naval Hospital, Plymouth.

Change of Telephone Number.

Dr. E. P. Poulton. Mayfair 1627.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

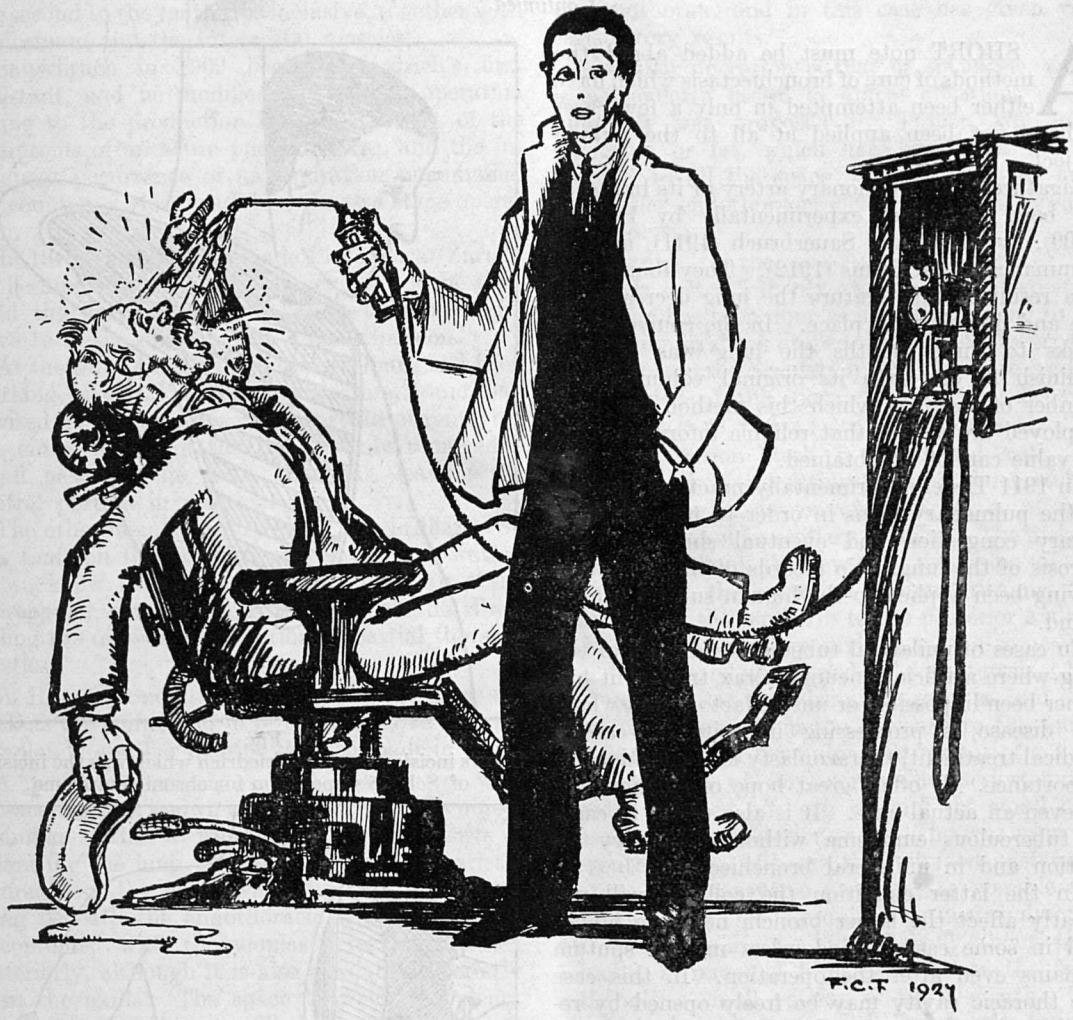
A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men* (*Medical and Dental*), **12s. 6d.** Post Free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.



THE MORNING AFTER ——.

"Say when!"

The Surgery of the Lung.

By Mr. GRAHAM CAMPBELL. Awarded the Treasurer's Prize, and read before the Guy's Hospital Physical Society on Thursday, April 14th, 1927.

Continued.

A SHORT note must be added about the methods of cure of bronchiectasis which ha e either been attempted in only a few cases or have not been applied at all to the human subject.

Ligature of the pulmonary artery or its branches has been performed experimentally by Halsted (1909), by Bruns and Sauerbruch (1911), and by Schumancher and Bruns (1912). They found that as a result of this ligature the lung decreased in size and fibrosis took place. In the course of six weeks to three months the lung was able to diminish to one-sixth its original volume. The number of cases on which this method has been employed are so few that reliable information on its value cannot be obtained.

In 1911 Tiegel experimentally practised ligature of the pulmonary veins in order to produce temporary congestion and eventual shrinkage and fibrosis of the lung. No records of this operation having been applied to the human subject can be found.

In cases of unilateral tuberculous disease of the lung where artificial pneumothorax treatment has either been impossible or unsatisfactory and where the disease is progressing in spite of careful medical treatment, thoracoplasty is of considerable importance. It offers great hope of amelioration or even an actual cure. It is also useful in cases of tuberculous empyema without secondary infection and in unilateral bronchiectasis.

In the latter condition the collapse will not greatly affect the larger bronchi near the hilum, and in some cases an odourless mucoid sputum remains even after the operation. In this case the thoracic cavity may be freely opened by resection of one or more ribs, the hand introduced and the lung palpated accurately to locate the lesion. When the cavity has been found the lung can be drawn up to the surface and the scalpel inserted, the cavity being evacuated, disinfected and packed with gauze. A counter incision is advisable for drainage. For those cavities which require external drainage Murphy strongly advised this procedure.

Extrapleural thoracoplasty was performed for the first time on December 11th, 1907, by the late Professor Friedrich, Chief of the Surgical Clinic at Marburg, Germany, on the advice of Professor

Fig. 1.
Shows incision used by Friedrich which was the incision of Schede's operation for chronic empyema.

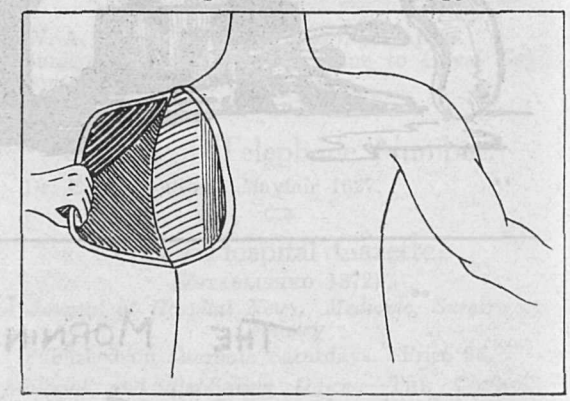


Fig. 2.
Sauerbruch's adoption of the posterior half of Schede's incision, calling it the "Hook incision."

L. Brauer. Brauer saw that artificial penumothorax treatment as practised by Murphy at that time could improve slowly patients suffering from tuberculosis, subject to the absence of adhesions.

He thus designed this operation for all cases, whether adhesions were present or not, using the chest wall in order to collapse the lung.

Friedrich being new to this operation, went ahead according to the original operation of Schede for chronic empyema ; his incision was accordingly the same. Then, as quickly as possible, he cut out the second to the tenth ribs inclusive, together with periosteum and the intercostal muscles.

Sauerbruch in 1909 became Friedrich's first assistant, and he modified the latter's operation owing to the production in some patients of the symptoms of an acute pneumothorax and the infrequent occurrence of an aspiration pneumonia. To counteract this he advised the two stage operation.

In 1910, when he was made Professor at Zurich, he became free to do what he chose, and he then used the posterior half of Schede's incision and gave to it the name of the " hook incision."

At the same time Wilms of Heidelburg had been working on his " columnar resection," and had devised an operation in which instead of removing the entire length of the ribs he only removed a small piece at the front and rear, leaving the central portion in position.

The other member who formed this brilliant trio was Ludolph Brauer, who proposed the operation as we know it to-day, and who named it " the subscapular paravertebral resection of the ribs," calling the other two operations " partial thoracoplasties."

In Brauer's operation the ribs are excised as far back as the spine, and in order to remove the ribs completely another incision is often made in front.

A procedure which is sometimes used with thoracoplasty is known as pneumolysis. Its object is similar to that of thoracoplasty. It consists of separating the lung with the visceral and parietal pleuræ from the chest wall, the line of cleavage being beneath the endothoracic fascia. When it is combined with thoracoplasty it is performed posteriorly, although it is also available anteriorly or in the axilla. The space between the pleura and the chest wall is now filled up so that the lung is compressed, the media generally used are fat or gauze, which promotes growth of granulation tissue. Tuffier uses fat from the abdominal wall, lipomata or omentum.

Baer uses paraffin wax containing a small percentage of bismuth carbonate and iodoform. The objection to using this wax is that it acts as a foreign body, and may be discharged after formation of sinuses. Archibald has used a portion of the pectoral muscles, whilst Sauerbruch uses a sterile pack, repacking continually, with the result that granulation is formed.

When used as an independent operation it is of little value since it is too localised. Its value in tuberculosis is almost negative, owing to that disease being rarely localised to the apex of a lung, nor is it satisfactory for bronchiectasis, too large a fill being required. The one important use appears to be that of supplement to an artificial pneumothorax, and in this case has given very satisfactory results.

A similar operation is that of apicolysis, which is particularly useful in apical affections of the lung. It was proposed by Tuffier, who used omentum or fat, which had been kept in cold storage, to fill the space formed round the apex by similar endothoracic cleavage to that used in pneumolysis.

Referring to the two-stage operation, A. T. Edwards says : " In my own series the two-stage operation has been done as a routine, owing to the diminution in shock and to the lessened absorption of toxins into the circulation from the more gradual compression of the lung. The interval between the stages is as near as possible three weeks.

The operation itself is performed with the patient in the semi-sitting posture, the vertebral column being made convex towards the affected side by means of an axillary cushion. The incision commences from the level of the spine of the scapula and the vertebral column, turning outwards along the tenth rib to the posterior axillary line. The muscles are divided in the same line, and the skin edges clipped off with towels. The ribs are exposed by raising the scapula, and each intercostal nerve from the eleventh to the fourth infiltrated with a few cubic centimetres of a 1 per cent. solution of novocain. The periosteum is rapidly stripped off each rib and the small back muscles off the posterior ends. The ribs from the eleventh to the fifth are then divided posteriorly as near the transverse processes as possible and anteriorly as far as is required for each individual rib. This is variable, but generally about $4\frac{1}{2}$ to 5 inches is removed from the fifth to the tenth with only a small portion of the eleventh. The wound is closed in layers with drainage for twenty-four to forty-eight hours and firm strapping applied over the dressing to fix the involved hemithorax, but allowing the tube to be withdrawn without disturbing the main dressing. The main point in after treatment is the insistence on the expectoration of sputum. Pain can be prevented by omnopon, and coughing assisted by firm hand pressure on the affected side during the effort. Sputum rapidly increases in quantity after the first three days, diminishing later. The temperature and pulse rates reach their maximum on the third day, owing probably to some retention of

sputum and to increasing absorption into the circulation from the collapsing lung.

The second stage, comprising the removal of portions of the first four ribs, is performed through an incision from the upper border of the trapezius and following the inner border of the scapula to its inferior angle. The further steps are similar to the first operation, the first rib only offering any difficulty."

He also points out that sanatorium treatment is advisable for several months after the operation has been performed, and especially is this important if the condition is tuberculous.

The complications of this operation appear to be several. They are—death from shock, death from pulmonary embolus, aspiration pneumonia of the better lung, infection in the wound arising from spread through the pleura, whilst one fatal case has been recorded of hæmorrhage due to erosion of the subclavian artery by the first rib.

In the report of Alexander, who has collected all the results of this operation for tuberculosis during the period 1918–25, he states that it has been performed 1,159 times by 53 surgeons, giving a cure or improvement in 57 per cent. of patients. These cases were all far advanced, sanatorium treatment having failed to improve the condition at all.

The indications for the performance of a thoracoplasty in tuberculosis are :—

(i) Fibrotic disease with mediastinal displacement.

(ii) Cases in which artificial pneumothorax has been successfully carried out, but in which reactivation results when the treatment is given up (adhesions generally prevent further artificial pneumothorax treatment).

(iii) Certain cases of long standing disease with more extensive cavitation.

(iv) Pleural effusions, recurrent in spite of other treatment.

(v) True tuberculous empyemata, unassociated with secondary infection.

(vi) Recurrent hæmoptysis resistant to other forms of treatment.

The important factor in all cases is that the disease must be mainly unilateral and a principle which should underlie all treatment is that there should have been no further spread of the disease in the better lung during the three months preceding the operation. The chest should be examined carefully, and physical signs and an X-Ray picture should indicate when an operation is to be avoided.

Thoracoplasty is an operation to be condemned for patients under 14 years, and also in those patients having lesions of tuberculosis elsewhere such as the intestines, kidneys and joints.

In bronchiestasis the affection must be unilateral in order to come within the scope of this operation, and since physical signs are often absent or indefinite even in advanced cases, it is sometimes extremely hard to decide which cases are suitable. An aid to diagnosis, however, is found in those substances which we can introduce into the bronchi which are opaque to X-Rays.

Such a substance is lipiodol, a compound containing iodine, which can be introduced into the lung in various routes.

It can be injected either :—

(i) Through the crico-thyroid membrane.

(ii) Through the trachea below the isthmus of the thyroid gland.

(iii) By means of the bronchoscopic route.

(iv) By means of a laryngeal syringe, and so using the transglottic route.

Of these methods the first one appears to be the best, and the apparatus needed is a 20 c.c. glass syringe, a special needle made by Allen and Hanburys (bluntly bevelled, $\frac{3}{4}$ inch in length, No. 15 Birmingham wire gauge), and a syringe and needles for the local anæsthesia.

The lipiodol used is raised to a temperature of 100° F. in order to decrease the viscosity and so allow the oil to flow freely. The patient having been tested with relation to cocaine idiosyncrasy, and no food having been given for three hours, the patient is given $\frac{1}{6}$th grain of morphia hypodermically, the head extended by means of cushions and the site of the crico-thyroid region is prepared with ether. Iodine must not be used in this preparation of the skin since it is opaque to the X-Rays. The skin, trachea and larynx are anæsthetised with 2 per cent. novocain for the skin and 5 per cent. cocaine for the other structures. Having filled the syringe with lipiodol, the needle is introduced through the crico-thyroid membrane and the piston withdrawn in order to see if air is entering the syringe freely. This test is essential and should be repeated during the injection ; at the same time the patient's position is varied so that the oil will flow into the portion of lung which contains the lesion. The patient is told to breathe deeply through the mouth during the injection and should on no account swallow or cough. The most satisfactory amount to be injected is between 15 c.cms. and 20 c.cms., the time taken for this being about 5–10 minutes.

After the introduction of the lipiodol the patient is handled very gently in order to prevent coughing, and after ten minutes the patient is X-rayed. In like manner the opposite lung is examined, an interval of seven days elapsing between the two examinations.

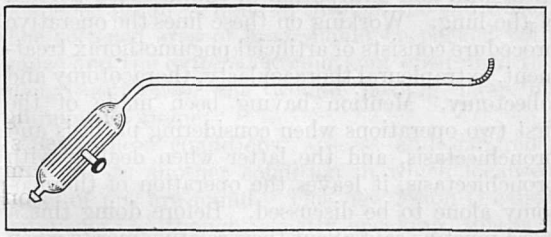
Both gangrene and abscess of the lung may arise from the same causes, but gangrene generally

occurs in greatly debilitated subjects and is often associated with diabetes, alcoholism or nephritis, although the most frequent predisposing factor to both is lobular pneumonia. Abscess of the lung was comparatively a rare disease resulting from the aspiration of a foreign body into the bronchus, from infection of a hæmorrhagic infarct, from rupture into the lung of a neighbouring septic focus, from a penetrating wound, from infection carried by the blood current and from malignant growths. Of recent years this condition has become more common, and the cause must obviously be the increase in number of tonsillectomies and probably also the changes in the lung following on the severe influenza epidemics now current. In a series of 692 cases of acute abscess or chronic pulmonary suppuration seen at the Mayo Clinic, 146 (21 per cent.) followed operation. Of these 146 cases, 31 per cent. followed tonsillectomy, 14 (9.5 per cent.) extraction of teeth and 38 (26 per cent.) laparotomy. The infection is in this instance embolic, as proved by the severe symptoms and widespread pulmonary involvement. The cases due to tonsillectomy were found to be due to the infection of the blood contained in the bronchi after operation, the infection being generally aspirated, the great majority of these cases occurring unde ɪgeneral anæsthesia. Mixed infection of the lung is common, and the organisms most frequently found are the pneumococcus, the streptococcus and the staphylococcus. These abscesses, generally single ones, occur more frequently in the lower lobe, and the incidence of involvement of the right lung is greater than that of the left.

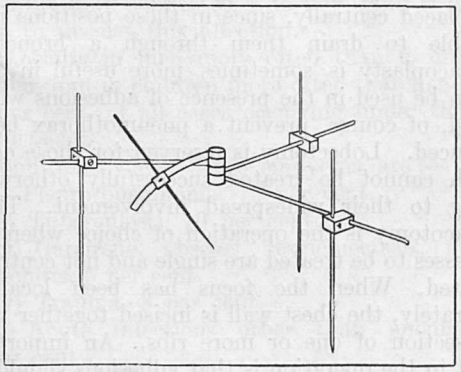
If the affection follows on pneumonia the symptoms are characteristic, for when one would expect the temperature to fall during the disease, increased fever, chills and sweats occur without a definite increase in the area of consolidation. The suspicion that this might be an abscess is strengthened when the fever assumes an irregular type with marked morning remissions, and when prostration and wasting are pronounced. The diagnosis is finally made when the patient suddenly expectorates a large amount of pus, which has a foul, disagreeable, penetrating odour, and when physical signs have demonstrated the presence of a cavity. The physical signs shown are those of consolidation in the early stages with diminished fremitus, respiratory sounds, and voice transmission when the amount of pus is large. If an abscess should have ruptured into a bronchus the signs of a cavity appear with coarse, moist, bubbling rales and amphoric breathing.

Aids in the diagnosis of these abscesses are found in X-rays and the exploratory needle, the latter being useful if drainage is performed after pus has been found. Failure to operate after discovering pus has led to pleural infection, gangrene and cellulitis. Another aid in diagnosis has recently been found in an instrument known as Hirtz's compass.

Large cavities are found quite easily, but the small ones may give rise to great trouble unless use is made of this instrument in conjunction with X-rays. Zero marks are placed on the legs so that they measure a distance equal to the radius of the sphere, an arc of which is seen in the centre of the instrument and on which a director works. All the legs being at zero, the indicator rod or director at its zero mark will indicate a fixed point whatever position along the meridian arc it may occupy. We know that the distance the image of an opaque body moves on a screen when an X-ray tube is moved a known distance determines



Myerson's combination of Lynah's branchoscope tube and Yanhauer's suction irrigation tube.



Hirtz's compass for use in localisation of lung abscesses.

by simple triangulation the distance of the body from the target and from the screen. When three opaque markers are placed on the chest and this method applied, the respective distances of the cavity of the abscess and these markers can be found. The approximate position in the chest of the cavity having been located by means of physical signs, the three opaque markers are arranged about this point. The tripod compass is then placed in position on the chest, being superimposed on the markers, and the X-ray apparatus brought into

use. As explained above, the distances from the surface, as marked by the markers, of the cavity are found and the legs readjusted. The director rod then points in the direction of the abscess.

Three types of abscesses are known and are called simple, multiple and multilocular, a peripheral zone of pneumonia generally surrounding them. This zone may be circumscribed or extensive and may appear in various stages of resolution or liquefaction.

The incipient stage of the abscess in all cases should be treated firstly by expectant methods, as also in cases where progressive improvement is made. Localised uncomplicated abscesses that do not show unmistakeable signs of improvement should be treated immediately by surgical methods. The principles to be observed are the promotion of drainage through a bronchus or through the chest wall and extirpation of the diseased portion of the lung. Working on these lines the operative procedure consists of artificial pneumothorax treatment, extrapleural thoracoplasty, thoracotomy and lobectomy. Mention having been made of the first two operations when considering phthisis and bronchiectasis, and the latter when dealing with bronchiectasis, it leaves the operation of thoracotomy alone to be discussed. Before doing this a word must be said about their relative merits when dealing with abscesses. Artificial pneumothorax treatment is especially useful when the abscesses are placed centrally, since in these positions it is suitable to drain them through a bronchus. Thoracoplasty is sometimes more useful in that it can be used in the presence of adhesions which would, of course, prevent a pneumothorax being produced. Lobectomy is reserved for those cases which cannot be treated successfully otherwise, owing to their widespread involvement. Thus thoracotomy is the operation of choice when the abscesses to be treated are single and not centrally situated. When the focus has been localised accurately, the chest wall is incised together with a resection of one or more ribs. An important point in the operation is that adhesions should be present, for in that case an opening can be made in the centre of the mass with a probe and enlarged with an artery forceps, thus allowing the pus to drain away. If no adhesions are present then an attempt should be made to create some before opening the abscess. It is only necessary to pack the wound with iodoform gauze down to the pleura and close by temporary suture, the pleura being opened a few days later without danger of infection taking place. If the abscess should have ruptured into a bronchus, external drainage should not be attempted, for healing in these cases is delayed indefinitely. Murphy advised that thoracotomy and separation of pleural adhesions should be performed or in the cases where no adhesions exist an artificial pneumothorax should be produced by introduction of sterile nitrogen gas into the pleural cavity. It is evident that a point of fundamental importance is the determination or not that adhesions are present.

A simple and effective means of ascertaining this was introduced by Murphy, who inserted a needle into the pleural cavity and connected it to a nitrogen apparatus. If any gas escaped into the pleural cavity this proved that no adhesions could be present.

About 1915 Yankauer began to irrigate lung abscesses by means of a cannula, which he invented, having as his object the aeration, irrigation of the cavity and aspiration of the contents and subsequently the obliteration of the cavity by the falling in of its walls.

In order to determine more accurately the exact extent of the cavities Lynah's method of introducing bismuth in oil into the lung is useful, while Jackson's use of bismuth powder is very effective in outlining the bronchial tree. If the patient be much improved it is a sufficient indication for further treatment. The favourable signs are those of decreased frequency of cough, decrease in amount of pus expectorated, absence of odour, recession of clubbing of fingers ; pulse rate and temperature again approach the normal and the general attitude of the patient is changed to that of cheerfulness.

Myerson found that this method of evacuating pus from lung abscesses was impossible with the existing instruments, for they were unable to be used in cases of upper lobe suppuration. He therefore designed a tube in 1924 by adapting the Lynah tube to the Yankauer suction irrigation tube, thereby obtaining an instrument that could be inserted into the upper lobe bronchus and any branch bronchus from which pus could be seen to be exuding.

This tube has the advantage of suction at the point of entry of the liquid, used for irrigation, into the larger bronchial tube, a thing not attainable with the suction bronchoscope and a single irrigation tube.

On account of the spring end being flexible and non-resistant, by proper guidance it can be readily introduced into any branch bronchus viewed through the bronchoscope.

The tube itself is made of sufficient length so that it can be used with the 45 cm. bronchoscope, or any shorter one which may be available. The smaller irrigation tube, on the extreme end of which is attached a spring tube 1.5 mm. in diameter and 3 cm. long, lies along the aspirating tube, which encloses it owing to its invaginating

its wall so as to envelope the smaller tube. The aspirating tube ends at the point at which the spring tube is attached, so that during irrigation only the spring attachment enters into or near the cavity while the aspirating tube is either within the branch bronchus or at its opening into the main bronchus. The handle has the irrigator tip at its side and the connection for the aspirator at the extreme end, the former being attached to a large glass syringe and the latter to any suitable suction apparatus.

The other condition similar to abscess is that of gangrene, the most frequent predisposing factor being pneumonia. Of deaths occurring in pneumonia, 3–10 per cent. are due to gangrene. It consists of a more or less extensive area of necrosis of lung tissue which has undergone putrefaction owing to infection by putrefactive organisms. The necrosed tissue appears as a collapsed dark coloured greyish or greenish slough. It can occur in two forms, either a diffuse type or a circumscribed type, and its duration is marked off into four well defined stages, which are those of necrosis' putrefaction, demarcation and elimination, and, lastly, reparation.

Generally the symptoms of this condition of the lung is preceded by those of pneumonia or other predisposing condition. One of the first signs shown by a patient is the presence of a horrible sickening odour of the breath, accompanied by a cough and expectoration. The sputum, if allowed to stand, separates out into three layers—an upper of dark frothy mucous, a middle of comparatively clear fluid, and a lower one of thick gangrenous material. Associated with these symptoms there is always a certain amount of fever, the pulse is weak and accelerated and respirations become rapid and shallow. Erosion of a vessel may take place and the hæmorrhage resulting from this will vary according to the size of the vessel involved.

Until 1881 the treatment of pulmonary gangrene had been purely medical, as a result of which the mortality stood at 80 per cent.

In 1881 Bull, of Copenhagen, operated successfully for this condition, and following this the treatment now used has been instrumental in lowering this figure to 30 per cent. Operative procedure is contraindicated in diffused gangrene, bilateral or multiple areas of gangrene and in those cases where metastatic lesions can be demonstrated.

In 1910 Picot, of Paris, advised opening gangrenous cavities by thermocautery, with an inspection of interior by means of an electric headlight, and should any bleeding points be seen they should be ligatured. He afterwards painted the cavity with zinc chloride and packed it with balsam of Peru.

In the same year Tuffier cured two patients by extrapleural rib resection and the introduction in one patient of a lipoma which had been removed from another. In the other case he introduced a piece of omentum which had been removed five days before and had been preserved in an aseptic condition in an ice box at a temperature of 2°–7° C. This procedure has the advantage of being applicable to all cases, whether adhesions be present or not.

The best method of dealing with gangrene is to explore after resection of one or two ribs, opening the gangrenous area and allowing drainage to take place. Care should be exercised not to infect the pleura so that if adhesions are not present the parietal pleura should be sutured to the visceral pleura after first placing a gauze pad over the external surface of the parietal pleura. The catgut passes through the gauze and the two layers of pleura so that when the necrosed tissue is opened it can be done so through the gauze pad. The softened area of lung should be packed with gauze and the external wound kept open until the slough separates, the wound healing later by granulation tissue.

Both these conditions, abscess and gangrene, give rise to another condition in which localised areas of pus are found. This new lesion is called empyema. Although, strictly speaking, this is a surgical condition of the pleura it originates in the lung, and since the lung and the visceral pleura are intimately connected I do not think it irrelevant to discuss this affection.

It occurs in men more often than it does in women, and in children more often than in adults, 45 per cent. of all cases occurring under the age of 10 years.

Conditions which cause empyema are :—

(i) Pleuro-pneumonia, 75 per cent.

(ii) Tuberculosis, 10 per cent.

(iii) Gangrene, abscess, bronchiectasis, putrid bronchitis, 5 per cent.

(iv) Trauma, 3 per cent.

(v) Acute infections other than pneumonia, 7 per cent.

The pus may be thin and sero-purulent in character or thick, rich in cells and containing much coagulated lymph, whilst later it becomes inspissated. Occasionally in pneumococcic empyemas the effusion is almost solid, and there is a considerable deposit of fibrin on the pleura, or in chronic cases the pleura may be thickened to 3 centimetres.

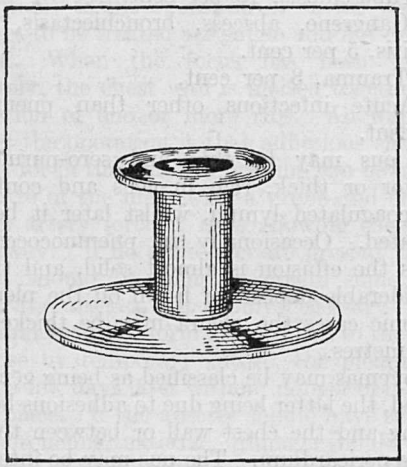
Empyemas may be classified as being general or localised, the latter being due to adhesions between the lung and the chest wall or between the lung and the pericardium. The pus may be interlobar, and the increase in liquid collapses and compresses the lung nearer its root.

If the condition follows on a pneumonia, or a pleurisy, the symptoms and signs which suggest some suppurative process are the maintenance of fever, absence of crisis, persistence of the physical signs in the chest and the constitutional symptoms. In some cases epigastric pain may be marked with tenderness and vomiting as the earliest signs. There is often a hard cough which is felt at the angle of the scapula, over the side of the chest or is referred to the terminations of the intercostal nerves in the epigastrium.

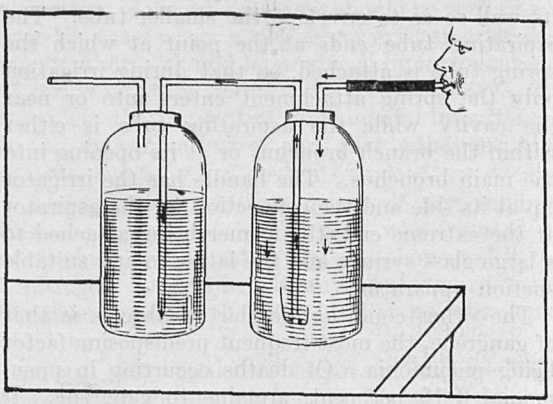
An empyema may burst through the pleura and the chest wall and form a large subcutaneous pulsating swelling, which is known as an empyema necessitatis, its point of exit being generally between the fourth and sixth ribs near the anterior axillary line.

In the differential diagnosis we must consider simple effusion, suppurative pleural effusion, large pericardial effusion and sub-diaphragmatic abscess. If the affection were a simple effusion it should show distinct signs of subsidence after two weeks, or if it were a suppurative pleural effusion the presence of rigors or continuous fever, progressive emaciation and constitutional disturbances unaccounted for by any primary lung disease would suggest the presence of an empyema. With a large pericardial effusion would be associated the disappearance of the cardiac impulse, muffling of the heart sounds and dulness in the fifth interspace of the right side. A different level of dulness would be obtained in the case of a subdiaphragmatic abscess and an X-ray examination of the abscess would cause the diaphragm to appear abnormally high on the affected side.

When considering latent empyemas they can be divided into two groups. The one group consists of those only seen at autopsies, and the other of those which perforate the chest wall. Of this latter group a distinction must be made between them and caries of the rib, caries of the spine and gumma, and this can be obtained by the use of the X-rays, whilst it can be distinguished from actinomycosis because in this latter condition pain is more usually a symptom.



Wilson's double-flanged Empyema Tube.



Apparatus for gradual expansion of lung by increase of intratracheal pressure.

The treatment of non-tuberculous empyema is to open up the cavity and drain as soon as pus is thought to be present. Some cases occur in which there is spontaneous cure by its rupturing into a bronchus or through the chest wall, while in still fewer cases there has been encapsulation of the small purulent foci with their subsequent absorption and calcification. These, however, do not allow of the postponement of the operation. The most satisfactory treatment is that of thoracotomy, with removal of portions of one or two ribs and the establishment of adequate drainage by the use of Wilson's double flanged empyema tubes or other suitable drainage tube. In all cases it is advisable to aspirate the pus before making the incision, but never should the cavity be irrigated, either at or subsequent to the operation unless the pus should contain pieces of necrosed material.

In those cases in which the operation has been delayed and in which the lung does not expand, it is advisable to make the patient increase his intratracheal pressure by blowing into one of two connected Wolff's bottles, one filled with water so that he transfers the water into the other and back again. The patient continues this treatment once or twice a day, the lung soon expanding to fill the thoracic cavity.

In those cases where the delay has allowed the fibrinous exudate to hold the lung in its collapsed state, Fowler and Delorme advised that the thoracic cavity should be opened freely and that the exudate be stripped off the lung.

Further delay will have produced cirrhotic changes which prevent expansion by these methods, and thus the chest wall is approximated to the lung by the performance of a thoracoplasty.

In the case of tuberculous empyema operation should be delayed until spontaneous rupture is likely to occur, at which time the pus can be evacuated, but strict aseptic conditions must be observed or added infection will follow. Some surgeons have discovered that the injection of an emulsion of iodoform after the removal of pus gives benefit in a few cases. Following this line of treatment, Murphy recommended aspiration of pus and the injection into the pleural cavity of from 20 c.c. to 60 c.c. of a 2 per cent. mixture of formalin and glycerin. After the first injection the fluid returns quickly, and after an interval of three or four days it should be removed by aspiration if much dyspnœa be present. The formalin mixture should be repeated once in 10 to 14 days whilst the fluid remains purulent; after the third or fourth injection the fluid tends to appear as a clear or slightly reddish cloudy serum. The formalin mixture should always be at least 24 hours old before using, and when it is injected the needle should be inserted through the chest wall obliquely. It was his opinion that the formalin solution sterilises the fluid and the sac, stimulates the production of polymorphonuclear cells and causes cicatrisation and contraction of the granulation tissue.

Beck, of Chicago, suggested the use of bismuth paste in the injection, while Ochsner uses two mixtures, No. 1 being made of one part of arsenic free subnitrate of bismuth and two parts of sterile vaseline, whilst No. 2 consists of 30 parts of bismuth, 60 parts of vaseline and 10 parts of paraffin. He used No. 1 at the beginning of the treatment and until the discharge had decreased to a small amount, when he used No. 2.

Then came the Carrel-Dakin method of sterilisation of wounds, and this method was adapted to empyemic cavities by irrigation with Dakin's solution. The complications following this treatment by Dakin's solution are hæmorrhage and bronchial fistula, the former not being serious and stopping on the discontinuation of irrigations.

(*To be continued*)

A Fairy Story for Nurses.

Full many years ago in land of splendid towers,
Brilliant blossoms and of graceful trees
Wherein there sang melodious birds of many hues,
There dwelt a damsel of surpassing charm
And sweet, most rare, delicious beauty,
Whose voice was like the gentle sound
Of fern surrounded spring of crystal water
That overflows its brim to sparkle down
Midst star-like flowers. Laomè was her name:
And yet within her mind there was not calm,
For endless days of sunshine make a tune
Of dull monotony and grating discord,
With the song of restless spirit.
Her silly days were spent in sole production
Of strange petted creatures loved by ladies of the land;
Small grotesque travesties of sheep,
Which had through years of careful choosing
Been reduced by laws Mendelic to headless,
Spineless, tailess, tummies on four short squat legs,
And covered o'er with black silk wool,
Fine flecked with silver.
The high-born ladies of the land
Did oft proclaim their deep affection,
With such terms as "Angel shape," or "dinkums,"
"Lovey," "sweetheart," "darling tiddles,"
For these small parasitic monsters of mal-applied pathology.

Throughout that land of yestertime
Were many wizards, for arts of war
Had so secured the mighty realm,
That now the armour rusted in the lofts,
And ancient swords with blunted edge,
Served old men weeding gardens.
Wherefore, the country's youth saw not
In visions splendid heroes clad in mail,
And fresh from hæmorrhagic victory,
But learned sages, black gown clothed,
With peaked caps and mystic wands,
For all affairs of State were worked
By strong enchantments.
To these the Lady Laomè did ever turn her thoughts
(When tired with caring for perambulating bellies).
With them she planned to move the wheels
Of Government and Nature; oft saw
Herself in robes of witchery with satisfaction

And knew a spangled cap with towering peak
Would suit her sleek black hair
And bright brown eyes.
While viewing thus within the galleries of mind
Alluring pictures of the future, there did come
Upon a black and silver night, all filled
With summer balm and song of Philomel,
An elfin shape that slid a-down a long moon beam,
To perch upon a dahlia and to sing:—
Dingle, bingle, cut and shingle,
There's not any time;
Though we grope
There is hope,
With the wise men you must mingle.
Dingle, bingle, cut and shingle.
Which tinkling song being ended soon
He bowed and leapt upon a moth,
With green, dull lucent eyes and wings
Of grey and gold, that fluttered heavily away.

Within her scented bed the dark eyed Laomë
Did ponder much upon this fairy happening
'Till with the first faint colour of a day
Arose and gathered some few simple robes
And ribboned other mysteries of femininity,
To serve her in her journey to the Cavern
Of the Red Star Wizards.
Strange, mighty men were these who lived
Within a cave of endless rambling depth,
And mouth that looked across the sea,
And ever echoed to the sound of restless waves
That broke upon the rocks below
And flung their rainbow jewels at screaming birds.
The fame of this wild place did stretch
To every confine of the world,
For here were brewed and doubly distilled
Such potent spells as never yet were seen,
Which magic labours tarried not by day nor night,
For would-be wizards flocked from every clime
To learn the secrets of enchantment.
For many days Laomë travelled through the land,
Clad thick in summer vestments,
Till in a pastel-shaded twilight boomed
The sound of waves re-echoed dully,
And faint was seen a thick red haze that issued
Slowly out the Cavern's mouth.
When purple velvet night lay o'er the land
The damsel wondering entered in and made
Obeisance to the Mater Witch, a stately dame
In purple gown, who kissed Laomë
On the cheek and bade her rest the night.
She would enlist ere long her name
With those who practised magic.

At time of morning food the maiden woke
And soon was thrilled with racing thoughts,
By sounds of bustling movement—and rising.
Donned her novice gown of grey with lilac girdle,
And hastened forth to chance upon
Two tiny elephants (some inches high)
That gambolled as do kittens in the sun;
The outcome these of spells gone wry in clumsy hands of students.
With wondering eyes, Laomë soon did reach
The central cave, from which were
Many diverticuli, wherein did work those wizards,
Who made special study; from such
A thunder throated sage in far recess
Came mighty sounds that rent the morning air.
'Tis said of him that on a day
He strode a-down the cavern's length and shook
With shattering voice a stalactite
Down from off the cavern's archéd roof.
Straight down it fell upon a guinea pig,
Full charged with spells of infinite power
That splashed this wizard from his cap to toe
And changed him to a hurricane that raged
Thrice round the world and spent itself
A gentle breeze that helped small splashing waves
Upon the gold sea shore . . .
The charm expended, once again he re-appeared
With softly sounding voice that soon began
To swell to old proportions.
Far through the gloom she saw strange
Writhing fumes that struggled out
From dim seen limbeck, and diffused
The cave from end to end with scents
That gripped the nose as in a vice of agony.
For there performed the cavern's Alchemist
His morning's task; erstwhile his whiskers
Waved with moving head that emphasiesed
His dissertations on some dragon's hæmoglobin.
And now there moved in spangled robes
Of costly cloth a mage, grey haired and stately,
Who held an ebon wand and wore
A pale grey cap quite three feet high
That terminated in the feather of a flamingo.
Magician this to the Imperial Household.
And as he moved, with undulating cadence
Of resounding voice to his appointed place,
This mighty wizard to the Royal House
Propounded latest formulæ for potent charms
Lying latent in the humble yeast
Of kindly housewives.

And yet there came from distant homes
The cavern's complement of sages, not few
Of whom did carry scimitars instead of wands

And specialised in GORE.
Extracting from the thick red blood
Such great enchantments as did make
The people of the land to catch their breath
and gape.
For many years Laomë's lot was cast
In this strange place and much she worked
'Midst student wizards, and ignoring all
Save one who wore the badge of limbeck boiler,
A senior office in the student course.
To him she had a strange attraction,
Though all day long she lashed him
With a biting tongue, at which he laughed
With hearty ringing tone and cast a spell
That made a black-haired mole appear
Upon her dainty nose,
Or changed the colour of one eye,
Or made her ears to grow until
They wobbled in the wind.
Which spells would last until the morrow
And quite often longer.
Her retribution for these horrid pranks
Was some small woman-spell learnt years ago
From aged cross-eyed witch with draggled
hair,
The one word "Sillyboy," pronounced in tones
Of deep conviction.
Whereat he faded into vapourous form
That blew out through the doorway.
To counteract this, much he delved
In ancient tomes, wherein he found,
One dead of night, a simple counteraction,
Which, if muttered with a horrid laugh,
Would swamp all woman-spells.

At stroke of noon he waited on the following
day,
With hearty chuckling exultation,
To see Saomë pass out to her mid-day food.
And as she passed he worked a charm
That made her hair to writhe (as did the ser-
pent's of Medusa's head) and quite
Dislodged her pointed hat; she turned
To see Laomë pass out to her mid-day food.
She finished quick he cried,
"Female"—following with a horrid laugh.
And now—so sad to hear—these potent spells
Half neutralised each other
So that he
Became half vapourous,
And she
A disembodied voice
Crying "Sill . . ."
That followed always where the wind
Did blow his smoke-like form about the world.

SURGICAL WARD CLERK.

Three Interesting Cases from General Practice.

1. *Two forms of cancer occuring simultaneously in the same subject.*

MRS. W.—D, æt. 65, 1922. A very emaciated woman with advanced arteriosclerosis, was the cause of frequent calls to control alarming attacks of epistaxis. After one such visit a lump about the size of a pigeon's egg was discovered in the right breast, together with a few small axillary glands. This was obviously malignant and the skin showed signs of early involvement. Although a bad subject, it was decided to do the complete operation. This was successfully carried through, but on the sixth day a further anæsthetic had to be given and the wound opened up in order to control a severe secondary hæmorrhage. Recovery was slow but uneventful. About nine months later two small nodules of recurrent growth had appeared under the skin over the ribs. As these were freely movable it was decided ot remove them. She then mentioned a persistent soreness of the vulva, and on examination there was a definite epithelioma of the clitoris extending to the labia on both sides with early inguinal glands. It was decided to deal with both these conditions at the same time, and what was probably a unique operation took place. While one surgeon was excising the mammary nodules, a second was excising the growth of the vulva and inguinal glands. Recovery from the latter was long and tedious, as the skin broke down and the granulations would not heal. After six months this part became dry and healthy. For a further year the patient maintained fair health apart from the frequent epistaxis due to the arteriosclerosis. But after this her heart began to get irregular and she died a peaceful and painless death at the end of 1925. About three months before death, recurrence of the mammary growth appeared in the right clavicle and in the 3rd and 4th ribs, and recurrence of the vulval growth also appeared in the left femoral canal, to be followed by a small femoral hernia! In this case it was doubtful, in the first instance, whether operation would be justifiable in such a bad subject. But I think that the risk

taken was fully compensated in that she had a painless ending, instead of infected and painful ulcerations of the breast and vulva, which is the usual course in such cases if untreated.

2. *Bilateral Ovarian Dermoids in a multipara.*

1924. Mrs. W—s, æt. 53, a lodging-house keeper, first came under my care complaining of increase in size of the lower abdomen and a feeling of discomfort due to weight. The bowels had been very obstinate for several years and she had not menstruated since the age of 39. She had had four living children, the first when she was 20 and the last when 30. The last three confinements had been long and the pain while carrying had been more severe than with the first. For the past 25 years she had always felt a weight pressing on the rectum, which she attributed to dropping of the uterus. There was no history of abnormal uterine bleeding. On bimanual examination, a large hard tumour about the size of the fist, could be felt in the pouch of Douglas, pushing the body of the uterus forward. Another tumour about the same size could be felt above the body of the uterus. The latter moved freely, but the former only with difficulty, and then with the uterus. I thought that the condition was due to fibroids, one pedunculated and free, and the other in the posterior wall of the uterus. The latter was giving rise to symptoms by obstructing the free evacuation of the rectum. A right paramedian incision was made from the pubis to an inch below the umbilicus. The condition was then immediately clear. The upper tumour was a cyst of the right ovary, lying on top of the uterus. This was removed and the uterus revealed as quite normal, the pelvic tumour being a cyst of the left ovary. This was impacted firmly in the pelvic cavity and was rather difficult to deliver before removal. On incision both cysts contained a large quantity of sebaceous matter, which, when washed away, showed the lining membrane to be thick and resembling skin, to which were attached several long tufts of hair. One cyst contained two teeth and the other some flatish pieces of bone and cartilage. Recovery was uneventful. The rectal symptoms have been improved, but are at times still obstinate. I think that this case is interesting in that the patient had born four children in spite of the condition found in both ovaries.

3. *An unusual combination of compound dislocations.*

1924. A.S., æt. 55, a miner, while working in a pit a tub ran away and struck him in its passage. He had put out his left arm against the wall to steady himself and the tub hit him just above the elbow joint. He was brought in with the styloid process of the ulna protruding through the skin at the front of the left wrist, and the head of the radius protruding through the skin at the side of the anticubital fossa. The styloid of the ulna was undamaged, but a small chip of the radius had been taken off where it had been forced past the ulna. Both wounds were very dirty with coal dust, and the shortening of the forearm was $1\frac{1}{4}$ inches. Under anæsthesia the wounds and bones were cleaned, and reduction easily secured. The forearm was fixed to a Carr's splint for ten days, allowing free movement of the fingers, with daily removal for dressing. From the tenth day massage was done daily. The wound at the wrist healed well, but a small sinus persisted at the upper one for some weeks. After three months, when it was obvious that the movements of rotation were not improving, it was decided to excise the head of the radius. Since then the patient has made fair recovery, but rotation of the forearm is only about one-third of the normal.

This case is of interest by reason of the ulna and radius telescoping past each other without definite fracture. This must be a rare condition and the forces which produced it are worth consideration. In the first place the wrist must have been completely dorsiflexed with the palm of the hand firmly fixed. Secondly, the elbow joint must have been fixed exactly at a right angle. In this position the blow was received, and the force must have continued to act after the initial impact. Also the two condyles (or more likely the whole length) of the humerus, together with the olecranon process of the ulna must have been taken fairly and squarely with minute accuracy. Further, the bones of the forearm must have been lying parallel, or fracture of the shafts would probably have taken place. If the force and positions of the bones had not been of such accuracy it is difficult to imagine how such fractures as Colles', or of the shafts of the radius, ulna or humerus could have been escaped.

H. S. WACHER.

Correspondence.

The Carbolic Spray.

SIR,—C. H. F. says he had a difficulty in finding a carbolic spray at Guy's in 1898. I was House Surgeon to Sir Henry Howse from October, 1899, to March, 1900, and he invariably used the spray during that six months. He also covered the backs of his hands with vaseline to protect them against the carbolic. I had dressed for an aseptic firm, and on my appointment was horrified to find the same pot of vaseline used for rectal examinations and for operations. I ordered a fresh pot of vaseline for each operation, and before using this vaseline was boiled in a water container by the dressers. I expect Sir Henry spotted what was being done, as each lot of vaseline then had a level unbroken surface, and he was a very clever man, but he said nothing. I do not think his results with the spray were any better or any worse than those of the aseptic firms.

I am, Sir,

Yours faithfully,

F. DOUGLAS TURNER.

The Royal Eastern Counties' Institution,
Colchester.
May 10th, 1927.

DEAR SIR,—Your correspondent C. H. F. asks when Sir Henry Howse ceased to use the carbolic spray?

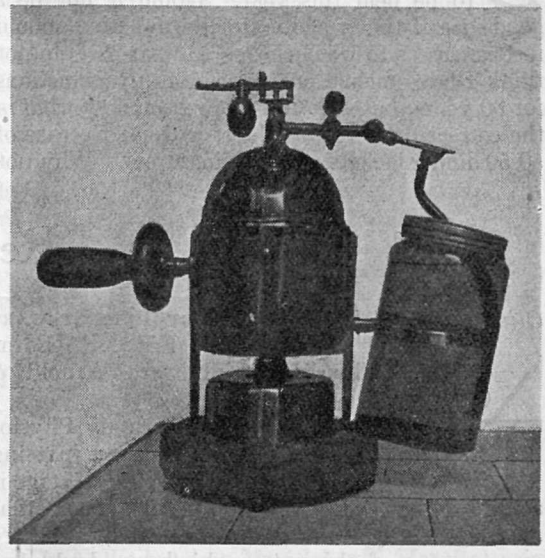
It was my privilege to act as Ward Clerk to Mr. Howse during his last three months on the active Staff—January to March, 1902. During those three months the spray was in regular use, and the duty of manipulating and directing it fell to the Ward Clerks. Mr. Howse always smeared his hands with sterilised vaseline to protect them from the action of the carbolic acid. I enclose a photograph of the spray taken at that time.

Yours faithfully,

W. M. MOLLISON.

23, Devonshire Place,
Upper Wimpole Street, W.1.
May 5th, 1927.

SIR,—In reply to your correspondent's inquiry as to when Sir Henry Howse gave up the use of the carbolic spray, I can certainly say that he used it constantly till the end of 1894, during which year I dressed for him for six months, and I believe that he continued to use it during 1895, if not longer. He came to Portsmouth in 1902 or 1903 to see a patient of mine, and had given it up some time before that.



CARBOLIC SPRAY
in use in March, 1902.

Yours faithfully,

M. ASTON KEY.

Valetta, Clarendon Road,
Southsea.
May 9th, 1927.

SIR,—There is a letter in the last issue of the GAZETTE asking when Sir H. Howse ceased using the Lister spray.

He continued to use the spray until he retired from the Staff at the end of March, 1902. I was a member of his last firm, and it was part of our duty as ward clerks, to carry the apparatus into the theatre and direct the spray during operations.

Yours,

F. W. MORTON PALMER.

13, Orchard Gardens,
Teignmouth, S. Devon.
May 15th, 1927.

The Biennial Dinner.

DEAR SIR,—I believe the Guy's Hospital Biennial Festival Dinner is once again due to be held this year. Would it not be a good idea if the organisers of the function should instruct us as to what clothes to wear? I do not think I have missed one of these festive functions for 30 years, but I do not know even now what is the correct dress to wear! It is usually a case of 50-50 dinner jackets and evening dress. Why not have a definite statement printed on the Dinner Ticket? I would suggest evening dress and decorations, etc.

Yours faithfully,

MONTAGU WAY.

Kenilworth Lodge,
Clarendon Road,
Southsea.
May 8th, 1927.

Reviews.

Clinical Physiology. By ROBERT JOHN STEWART MCDONALD, D.Sc., M.B., F.R.C.P. Edin. Published by Messrs. Edward Arnold & Co. *Price 21s. net.*

THE change from the Science of Physiology to the Art of Medicine on passing into the wards from the pre-clinical stage is a sufficiently difficult one and any book that aids the change is to be welcomed, as there are very few of this nature, chiefly, no doubt, because of the fact that there are few unalterable rules in medicine and though so-called explanations are more numerable than the observations producing them, very much of medicine is essentially empirical, therefore, to fit in the none too stable theories of physiology with the beliefs of medicine is a task that invites neglect.

Professor McDowall, who before turning to Physiology had considerable clinical experience, has produced a book which should be of value more particularly to men at about the stage of second three months ward clerk, as with the first three months it is of little value to read of the physiological aspects of conditions not yet clinically seen.

The book suffers necessarily from the fact that any physiological principles stated must be enumerated dogmatically and there are in consequence many points—usually small—which are built up on very doubtful evidence. For instance, the statement that occasionally, "as in status lymphaticus, there is sudden failure of the heart from stimulation of the inhibitory mechanism."

In Chapter VIII. a laudable, if meagre, attempt is made to bring modern psychological concepts into line with physiological teaching, which is not easy, if physiology—a science—is measurement, though it seems very probable that the brain is subject to laws that will be to some extent demonstrable by the bio-chemist of the distant future. That psychology should be included in a book on physiology seems a good omen for it is lamentably neglected as a rule.

The chapters on the pulse and heart are especially good, being both clear and concise. while the section dealing with digestion shows well how little is known about the actual basis of the dyspepsias.

With the abundance of reading that the student of to-day has to get through, one hesitates to recommend books that are not of very obvious value, but it does seem that this would be a useful book to have handy to read in such times as are spent in travelling to work or in the periods of short leisure that frequently occur during the day.

Its chief defect is its undoubtedly unavoidable dogmatism.

The Treatment of Chronic Arthritis and Rheumatism. By H. WARREN CROWE, M.D., B.Ch. Oxon., M.R.C.S., L.R.C.P. Published by the Oxford University Press (Mr. Humphrey Milford). *Price 8s. 6d.*

RHEUMATISM, and particularly rheumatoid and osteo-arthritis are conditions for which the average student soon develops a distaste and comes to consider as being dull diseases for which little can be done, once the tonsils and teeth are removed.

Later, as an out-patients officer, this distaste is increased by the hordes of middle aged patients with creaking, deformed joints and pains all over themselves.

This distaste is chiefly the result of the fact that so little can be done, and one comes to regard the condition as one of the unavoidable curses of mankind which must run its course. Therefore, a book which attacks the problems hopefully is refreshing, even if not completely convincing.

The general attitude towards vaccines at this Hospital is by no means clear cut, but that they are given seems to show that they are not considered entirely valueless.

In addition to the general measures, Dr. Crowe advocates strongly, as the main thesis of his book, the careful use of vaccines, and outlines very minutely his schemes for their administration. Particularly interesting is his use of the variation in weight as an indicator of the vaccine dosage. For, the author asserts, the daily weight curve varies almost identically with the immunity curve, and is much more sensitive than the temperature to cause a rise of which too large doses must be used to be of benefit.

To the ordinary varieties of organisms the author adds another whose normal habitat is the scalp (which constitutes, therefore, another possible focus of sepsis; does this mean that scalping, after the manner of the Red Indian, will be a surgical procedure of the future?) This organism, which he names the Micrococcus Deformans, is a variety of the staphylococcus, and has been recovered by him in pure cultures from the joints of rheumatoid arthritic patients at operation. For osteo-arthritis Dr. Crowe holds responsible the streptococcus group, and recognises a mixed infection of the two groups.

The book includes very useful sections on the orthopædic aspect of arthritis and the various methods of desensitisation.

Sport.

Swimming Club.

THE water polo season opened auspiciously on Monday, April 25th, with a draw against a fairly strong combination from the Forest Hill S.C. The Hospital team was not at full strength, and evidence of the usual early season "out of training" was not lacking. At the end of the first half, after having defended the "shallow end," the Hospital found they were two goals to the good, but they lost this lead during the second stage, both through the action of the pace of the game on a team not yet in condition and through what we may only term an attack of nervousness shown by the goalkeeper, R. N. C. Smith, who had but for this momentary lapse played very well. Then, too, T. L. Kark hesitated too long on one occasion before completing a movement in which all of the team partook. With practice and training the team should soon be a first class one. J. W. H. Jones, who captains the team, and C. D. Malone played with untiring energy, and both deserved better support. However, the result shows that we were not any weaker than our opponents, but the team is capable of better performances. Still, at this stage of the season it shows definite strength to draw with Forest Hill 2–2.

The following played for the Hospital:—

R. N. C. Smith; R. W. Stephenson, C. M. E. de Gruchy; C. D. Malone, T. L. Kark, J. W. H. Jones, C. M. H. Jones.

The services of Mr. A. J. Howcroft, the well known Olympic coach, have been obtained, and these are available, to anyone desiring to benefit by them, on Thursdays from noon to 1 p.m., at Lavington Street Baths. Two teams will be playing this season, and matches have been arranged accordingly.

The United Hospitals' S.C. Gala takes place on Tuesday, July 5th, at the Bath Club.

Guy's v. R. M. A. Woolwich.

ON Wednesday, May 4th, the Hospital went down to Woolwich to swim against the Royal Military Academy, and did it to good effect, beating them by a total of 44 points to 11.

C. E. M. de Gruchy won the first race, 30 yards, in the fair time of $15\frac{3}{4}$ seconds, and King, a newcomer, who has a pretty style and distinct possibilities, came in third. Malone and J. W. H. Jones succeeded in clearing the board in the 60 yards in $35\frac{1}{5}$ seconds. James, on his first appearance for the Hospital, won the diving and plunging, the latter with a plunge of 38 ft. 4 in. Smith, who was really the first string in the diving, was only placed third, but he must have gained an easy first had he not turned before entering the water from the high dives. James would do well to watch a first class diver and attempt to copy his style.

The 4-length relay race was won in excellent style by 10 seconds.

Polo followed, and within the first few minutes Kark scored, and O. M. H. Jones soon followed suit. In the second half goals came from C. M. H. Jones, J. W. H. Jones and C. D. Malone. Thus, we beat a moderate team in a moderate game by 5–0.

Appended are detailed results:—

30 *Yards*—

1st, C. E. M. de Gruchy; 2nd, Billson (R.M.A.); 3rd, D. P. King; 4th, Jackson (R.M.A.). Time, $15\frac{1}{5}$ seconds. Points for 6, against 4.

60 *Yards*—

1st, C. D. Malone; 2nd, J. W. H. Jones; 3rd, Mackenzie (R.M.A.); 4th, Manley (R.M.A.). Time, $35\frac{1}{5}$ seconds. Points for 7, against 3.

Diving—

1st, W. L. James; 2nd, Billson (R.M.A.); 3rd, R. N. C. Smith; 4th, Dowson (R.M.A.). Points for 6, against 4.

Plunging—

1st, W. L. James; 2nd, Manley (R.M.A.); Length 38 ft. 4 in. Won by 4 ft. 1 in. Points for 5, against 0.

120 *Yards Relay*—

Won by 10 seconds in 63 seconds. Order of swimming—C. D. Malone, D. P. King, J. W. H. Jones and C. E. M. de Gruchy. Points for 10, against 0.

Water Polo Team—

R. N. C. Smith; C. A. Wakeford, C. E. M. de Gruchy; C. D. Malone; T. L. Kark, J. W. H. Jones (capt.), O. M. H. Jones.

Guy's v. Hampstead Priory.

OUR first home match, played at Hoxton Baths, Pitfield Street, against the Hampstead Priory S.C., on Friday, May 6th, was won by 4–1. The team is rapidly improving, and newcomers are gradually being tried out. The Hampstead Priory turned out a strong team, and the match was a well fought one.

Wakeford gave us our first goal, but Bean equalised for our opponents soon after. However, Malone gave us of his best with the next goal, and G. M. H. Jones sent us further ahead. Late in the second half J. W. H. Jones added another goal.

Throughout the game the Hospital showed the greater ability to use their opportunities, but this did not prevent a hard fought game.

Guy's Team—R. N. C. Smith; C. H. Wakeford, T. L. Kark; L. Brown; C. D. Malone, J. W. H. Jones (capt.), O. M. H. Jones.

Guy's v. St. Paul's School.

BY the narrowest of margins the Hospital beat St. Paul's School in a swimming match on Saturday, May 7th. On the results we led by 20 points to 19. Perhaps we were unlucky in as much as de Gruchy slipped in taking off in the relay race, and yet was only beaten by a foot. However, the match provided good sport, and the closeness of the points gained gave an added interest.

Malone and J. W. H. Jones gave the Hospital a good start in coming in an easy first and second in the 100 yards. de Gruchy came a very close second in the 1 length, and James showed a much improved form in his diving, and was placed second. Smith, on the contrary, was not as good. He spoils a good take-off by turning before entering the water. Colvin dived excellently for our opponents, and was well worth watching.

Theis, on his first appearance this season, played well to score 3 goals, but due credit must be given to the rest of the water-polo team, who are rapidly exploiting the meaning of the word combination. Both Malone and J. W. H. Jones succeeded in beating the opposing defence and scored deserved goals. However, St. Paul's did not let us have it all our own way, both Maitland and Race scoring for them, but leaving us winners by 5–2.

Detailed results are given below:—

100 *Yards* (3 *lengths*)—

1st, C. D. Malone; 2nd, J. W. H. Jones; 3rd, M. A. Colvin (St. Paul's); 4th, J. T. Race (St. Paul's). Time 67 esconds.

33⅓ *Yards*—

1st, S. E. Delafield (St. Paul's); 2nd, C. E. M. de Grouchy; 3rd, F. Martin (St. Paul's); 4th, D. P. King. Time, 17⅖ esconds.

4 *Lengths Relay*—

1st, St. Paul's. Time, 72⅕ seconds.

Guy's Team—C. D. Malone, D. P. King, J. W. H. Jones, C. E. M. de Gruchy.

Diving—

1st, M. A. Colvin (St. Paul's); 2nd, W. L. James; 3rd, J. T. Race (St. Paul's); 3rd, R. N. C. Smith.

Water Polo—

Won by Guy's 5–2.

Guy's Team—R. N. C. Smith; C. E. M. de Gruchy, T. L. Kark; C. D. Malone; S. E. Theis, J. W. H. Jones (capt.), O. M. H. Jones.

Tennis.

Guy's v. Beddington Park.

PLAYED at Hackbridge, on Saturday, May 7th, this match resulted in a good win for the Hospital by 7 matches to 1. Trafford and Van den Broucque won all their matches, but had a keen struggle against the Beddington 1st pair, eventually winning by 7—5, 5—7, 7—5, after a match which lasted nearly two hours. Pearson and Lomax lost one match to their first pair, who were by far the best of our opponents. They should make a very strong combination with more practice together. Tupling and Arkles played a steady game, but lost rather easily to their first pair. Tupling was rather inclined to keep to the base-line instead of coming up to the net.

Trafford and Van den Broucque—

Beat Fleming and Winter, 7—5, 5—7, 7—5.
Beat Dodd and Park, 9—7, 7—5.
Beat Fletcher and Fletcher, 6—3, 6—2.

Pearson and Lomax—

Lost to Fleming and Winter.
Beat Dodd and Park, 6—3, 6—3.
Beat Fletcher and Fletcher, 9—7, 6—3.

Tupling and Arkles—
Lost to Fleming and Winter, 2—6, 3—6.
Beat Dodd and Park.
Beat Fletcher and Fletcher, 6—2, 4—6, 6—4.
Guy's 7 matches, Beddington 2 matches.

Guy's 2nd VI v. King's 2nd VI.

PLAYED at Denmark Hill, on Wednesday, May 4th, this match was won very easily by 8 matches to 1. All of the team played well, but were not really tested as the opposition was very moderate.

Peregrine and Booker—
Beat Parish and Hall, 6—0, 6—1.
Lost to Sapwell and Wale, 6—3, 4—6, 6—8.
Beat Snowball and Jones, 6—1, 6—0.

Lomax and Housden—
Beat Parish and Hall, 6—0, 6—1.
Beat Sapwell and Wale, 6—2, 6—0.
Beat Snowball and Jones, 6—0, 6—2.

Kurtz and Gilbert—
Beat Parish and Hall, 6—0, 6—0.
Beat Sapwell and Wale, 6—1, 7—5.
Beat Snowball and Jones, 6—2, 6—0.

Guy's 2nd VI v. Shirley Park 2nd VI.

PLAYED at Honor Oak Park, on Saturday, May 7th, this match was lost after a keen and interesting struggle. Peregrine and Booker again both played very well and only lost to Tapsett and Footnum after a very hard match. Kurtz and Housden played well in their first match, but later tired badly, and, except for one period, when they came up to the net and attacked vigorously, were always on the defensive. Harley was again disappointing, but Gilbert showed improved form.

In this match many points were lost through serving "double faults." This error can easily be corrected by serving with a little more care, and even when leading 40—love it is a mistake to slam the ball over the net for the second service.

Peregrine and Booker—
Lost to Tapsett and Footnum, 5—7, 12—10, 2—6.
Beat Street and Sprackling, 6—3, 6—2.
Beat Wallis and Hughes, 6—3, 8—6.

Housden and Kurtz—
Lost to Tapsett and Footnum, 4—6, 6—3, 0—6.
Beat Street and Sprackling, 6—3, 4—6, 12—10.
Lost to Wallis and Hughes, 4—6, 1—6.

Gilbert and Harley—
Lost to Tapsett and Footnum, 2—6, 1—6.
Drew with Street and Sprackling, 6—8, 7—5.
Lost to Wallis and Hughes, 7—9, 3—6.

Guy's 2nd VI v. R.M.C. Sandhurst.

PLAYED at Camberley, on Wednesday, May 11th, and lost by 5 matches to 3, 1 match drawn.

Peregrine and Kurtz—
Lost to Stocker and Wethered, 0—6, 4—6.
Beat Still and Sandbatch, 4—6, 6—0, 6—1.
Beat Low and Webb, 6—2, 6—2.

Booker and Housden—
Lost to Stocker and Wethered, 4—6, 5—7.
Lost to Still and Sandbatch, 4—6, 6—8.
Drew with Low and Webb, 8—10, 5—5.

Crombie and Holman—
Lost to Stocker and Wethered, 2—6, 2—6.
Beat Still and Sandbatch, 6—4, 7—5.
Lost to Low and Webb, 6—3, 1—6, 1—6.

Guy's 2nd VI v. Beddington Park 2nd VI.

PLAYED at Honor Oak Park, on Saturday, May 14th, and lost by 6 matches to 3.

Booker and Gilbert—
Beat Bryant and Bryant, 6—1, 6—2.
Beat Lintott and Trundle, 7—5, 8—6.
Lost to Faulkner and Stone, 3—6, 6—3, 6—8.

Housden and Crombie—
Lost to Bryant and Bryant, 2—6, 3—6.
Beat Lintott and Trundle, 6—4, 3—6, 6—4.
Lost to Faulkner and Stone, 6—4, 5—7. 0—6.

Hollis and Holman—
Lost to Bryant and Bryant, 2—6, 2—6.
Lost to Lintott and Trundle, 4—6, 4—6.
Lost to Faulkner and Stone, 4—6, 1—6.

Guy's 3rd VI. v. Caledonian 2nd VI.

THIS match was played at Honor Oak Park, on Wednesday, May 11th, and was left drawn. Gilbert played a steady game, being particularly good at the net, but his ground shots need practice, being at the moment, rather weak. Hollis played well, but the remainder of the team were rather disappointing as the opposition were not very strong. Lack of match play was evident and it is hoped that more 3rd VI. matches can be arranged so that this may be rectified.

Gilbert and Hollis—
Beat Cowell and Staines, 7—6, 4—6, 6—2.
Beat Smee and Teasdale, 6—2, 6—4.

Drew with Pomeroy and Turner, 3—6, 6—4.

Ginn and Wheeler—

Lost to Cowell and Staines, 4—6, 1—6.
Lost to Smee and Teasdale, 4—6, 4—6.
Lost to Pomeroy and Turner, 3—6, 6—7.

Irish and Yendall—

Lost to Cowell and Staines, 2—6, 4—6.
Drew with Smee and Teasdale, 1—6, 6—3.
Drew with Pomeroy and Turner, 2—6, 6—2.

Guy's Hospital Athletic Club.

THE date of the Annual Sports has been fixed for Wednesday, June 8th, at 2.30 p.m. Preliminary heats to be run off on Tuesday, June 7th, at 5.30 p.m.

A large number of entries is required to make the Sports as successful as in past years.

A list of events has been posted up in the Colonnade, and all men interested should put their names down immediately and watch the notice board for further notices.

The University of London Inter-College Sports take place on May 25th. Guy's have been holders of the Cup for several years and we again want the Cup this year, so all athletes are requested to get into training as soon as possible.

The Inter-Hospital Sports are to be held on Wednesday, June 15th. We want to try and recover the Cup this year. Fortunately, this is just a week after our Meeting, during which time our team are especially requested to keep fit.

Hospital Information, etc.

Pass List.

Conjoint Board.

Final Examination.

April, 1927

Medicine

P. H. Loretz
*B. M. Sundaravadanan
*G. R. S. Stewart
*N. H. Skelton Browne
J. H. Richmond
*S. C. Lewsen
*A. H. B. Heeson
*H. Girling
*C. A. R. Hicks
I. S. Abrahams
*S. J. de Nevasquez
*R. S. de Bruyn
K. S. Vinkatachala Ayyar
*E. T. Clifton
*K. G. Nerurkar
*A. Rabinowitz
*H. S. Gaussen
*T. G. Benjamin
R. E. Havard
N. H. C. Allen

Surgery

*S. J. de Nevasquez
*K. G. Nerurkar
*H. Girling
W. J. E. Radford
M. K. Giji
P. C. Wickremisinghe
R. T. Jones
I. Bakhsh
C. E. Gallagher
L. E. Lane
T. S. Daniels
*B. M. Sundaravadanan
*S. C. Lewsen
J. R. Rickett
*C. F. Brockington
D. E. Dunnill
O. Plowright
J. A. Vernon
E. C. Till
*J. K. Moore
S. T. Williamson

Midwifery

*N. H. Skelton Browne
J. R. Rickett
W. J. E. Radford
E. H. Hudson
D. E. Dunnill
P. M. Deville
W. H. Myburgh
W. S. McConnell
E. C. Till
W. V. Beach
C. S. Gross
*C. F. Brockington
E. L. Graff
O. Plowright
W. F. Hudson
J. A. Vernon
I. Bakhsh
G. M. Housden

Society of Apothecaries of London.

April, 1927

Midwifery

H. S. Marks

University of Cambridge.

2nd Examination for Medical and Surgical Degrees.

Easter Term, 1927

PART III

Pharmacology and General Pathology

D. Divine
I. B. Morris
A. Eckford

The Services.

Royal Naval Medical Service.

Surgeon Lieut.-Comdr. H. L. Peregrine to be Surgeon Commander.

Appointment.

W. A. Young, appointed Professor of Bacteriology, College of Medicine, Singapore.

Marriage.

THORNTON—EVANS—On February 19th, 1927, at St. Joseph's Church, Bombay, by the Rev. H. Roper, Captain J. C. T. Thornton, 3rd Batt., Bombay Grenadiers, eldest son of Mr. and Mrs. C. C. T. Thornton, of Beaulieu, France, to Margaret, eldest daughter of Mr. and Mrs. H. Evans, Towyn, Wales.

Birth.

PEREGRINE—On April 27th, 1927, at "Moorend," Lockington Avenue, Hartley, Plymouth, to Jean (née Gray), wife of Surgeon Commander Hugh L. Peregrine, Royal Navy, a daughter.

EDS. { P.F.S. C. / G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *June 4th, 1927.* *Number 1014*

PASSIM

IT has been stated that Captain Lindbergh's achievement of flying the Atlantic has caused all the American business houses furiously to think how to turn the fact to commercial advantage. We wonder whether a similar incidental result followed the exploit of Christopher Columbus ? It is difficult to imagine a horde of suitably garbed heralds touring the land of Portugal and proclaiming the name of the shipbuilders of the gallant navigator's craft and taking orders, or announcing that eggs of the same quality as that used to demonstrate the obscure simplicity of his deed may be obtained complete with the signature of Christopher Columbus, from Senor Pouletto, the premier poulterer at Lisbon.

There was perhaps in those days less competition and less necessity for creating a demand, and undoubtedly less facility for advertising.

The principles underlying modern advertising would, if introduced into the world of medicine, act as a very dismal poison if they were used for individual benefit. The type of man who renders himself conspicuous on ward rounds and on all possible occasions for the purpose of personal advancement is perhaps a suggestive indication of the possibilities of advertisement. It seems to us, however, that there are legitimate claims to publicity for certain aspects of medicine. More extensive propaganda in favour of research seems to be indicated, particularly at this Hospital, where it is many years since any contribution of outstanding nature has been forthcoming, with exception of, and due regard to the development of bone surgery.

It must certainly be due to lack of opportunity rather than talent, for the difficulties in the way of research are manifold and obvious. The Hospital is firstly and foremost a teaching school for general practitioners, which almost precludes the concentration of a number of special clinics for individual diseases, such as we believe is the system in America. At these clinics one physician, for example, will see nothing but diabetes. This was the method of Bright, who for a considerable period had the use of Clinical Ward to the exclusive investigation of nephritis, with, of course, his unparalleled results.

Though the provision of a thorough grounding in the principles of medicine is an admirable thing, the stimulus of actually witnessing a discovery in the process of making is inestimable, and it is that which seems to be lacking.

The earliest discoveries in the field of medicine were in the nature of recognition and classification of various syndromes—subsequently the immediate causes of many have been elucidated to some extent, but in the vast majority the less immediate causes are still a complete mystery. Diabetes, for example, was found to be a deficiency of the pancreatic hormone—but why the deficiency? Similarly with the microbic diseases ; the soil should surely be the next for exploration. Why does streptococcal tonsillitis sometimes ruin the heart and sometimes the kidneys ?

To criticise destructively is, however, an ability of any person who is capable of stringing words together; and attempting something constructive, with a full sense of the humility of inexperience, we would suggest a special research ward in which series of cases of one type could be studied under a whole time Research Physician. This ward, together with " Clinical " and Nervous and Skin Diseases, might be under a House Physician, preferably one who had already done a general H.P. appointment, thus doing away with the unsatisfactory scheme at present in force, whereby " Clinical " is a side line to the ordinary work.

With regard to funds the occasion of the Centenary of the Discovery of Bright's Disease must be an excellent opportunity for a special appeal.

We recently had the very great plasure of dining with the Incorporated Association of Hospital Officers—the many people who serve the hospitals in lay capacities. This Association has for 25 years aided in the stimulation of its associates to a very high grade of efficiency to which the voluntary system in this land owes much. As Lord Riddell remarked, in toasting the Voluntary Hospitals, although the equipment of hospitals outside this country might be superior, the spirit in Great Britain was unequalled. By way of example he cited an ingenuous cook at a certain West Country hospital at which there was a small outbreak of smallpox. When it came to her turn for vaccination she objected to having it performed on her arm on the grounds of resulting disability —similarly concerning the leg. On the doctor asking for suggestions she thought for a short while and then said : " Well, we don't sit down much in this place, doctor ! "

We offer our hearty congratulations to Mr. Malleson, who has been awarded the John Tomes Prize for 1924–26 for work on the Histology and Pathology of Dental Tissues.

We offer our best congratulations to the Rowing Eight, who recently won very easily the Inter-Hospital Cup.

We draw attention to the notice published elsewhere about the Fourth Year Prize in Dental subjects, the last day for entry being June 21st.

In response to many requests we are inserting in this number a reproduction of a photograph of Miss Hogg.

During the present month there will be open for public inspection many of the most beautiful gardens in England on behalf of the Queen Alexandra Memorial Fund, and we are pleased to notice that, through the kindness of Mrs. Rowlands, the lovely Surrey gardens and grounds of Hurtwood Edge, Ewhurst, are open for public view on Sunday afternoons between the hours of 2 and 8 p.m. By kind permission of the *Daily Chronicle* we reproduce on another page a specimen photograph of this garden, extending to 8 acres. The house—a copy of a Tuscan villa—is on the south side of the Surrey hills, overlooking the Sussex Weald, and the gardens contain an unusual collection of rare trees and shrubs from all parts of the world. A motor drive to this beautiful part of Surrey—close to the estate just acquired by our Royal President, the Prince of Wales—affords a most delightful trip, and we hope many visitors will take advantage of the privilege Mr. and Mrs. Rowlands have placed at the disposal of garden lovers, who, as well as giving themselves the pleasure of a visit, will also benefit the Hospital by contributing the small charge of 5*s*. for admittance and light refreshments.

This splendid initiatory movement might well be followed by other persons interested in Guy's who may possess in the Home Counties attractive gardens and grounds in similar beauty spots, as, should they be willing to open them for some period during the coming summer or autumn months, they may by this means be able to render substantial assistance towards the financial needs of the Hospital, which at the present time are extremely urgent.

Notice.

Dental School.

FOURTH YEAR PRIZE IN DENTAL SUBJECTS.

OPEN to Students who have studied in the Dental School of Guy's Hospital for not more than 4 years (including a 2 years' course of Prosthetic Dentistry), and to those Students who have studied in the Dental School of Guy's Hospital for not more than 2 years, where their course of Prosthetic Dentistry has been completed elsewhere.

In both cases the candidates must not have studied at any other Medical or Dental School prior to the commencement of their Dental Studies at Guy's Hospital, except with regard to the courses of Prosthetic Dentistry, Chemistry and Physics.

SUBJECTS

Dental Surgery, Operative Dental Surgery and Dental Bacteriology

The Examiners, at their option, may hold a written or viva-voce examination, of which due notice will be given for the purpose of more thoroughly testing the comparative merits of the candidates.

The last day for handing entry forms into the *Medical School Office* is *Tuesday, June 21st*, 1927.

Miss MARGARET HOGG, C.B.E.

Late Matron of Guy's Hospital.

A GARDEN ON VIEW FOR GUY'S—A glimpse of part of the wonderful eight-acre garden of Hurtwood Edge, Ewhurst, Surrey, close to the Prince of Wales' new summer residence, which will be open by kind permission of Mrs. Rowlands, to the public on Sunday afternoons and evenings during June. A moderate charge will be made (including tea), which will be devoted to Guy's Hospital. (see "Passim").

Obituary.

John Hugh Barendt, R.N.

WE have regretfully to record the passing of a young and promising student, John Hugh Barendt, who passed away on May 10th, 1927.

All his fellow students and all who came in contact with him could not but discover his charm of manner and great personality, and to have known him was to like him—hence the great shock and sorrow that one and all felt in losing so delightful a friend.

Although Mr. Barendt was pursuing medical studies as a future career, it was not in this walk of life that his first and real inclinations led him after his college days, for, born in Liverpool on January 15th, 1898, he was educated at Liverpool College, The Lower School of John Lyon, Harrow, and New College, Herne Bay, after leaving the latter he passed the examination for a Naval Cadetship and entered the Royal Naval College, Keyhaven, in September, 1916. This enabled him to embark on the career which was nearest his heart.

He had "his ancestor's call for the sea"—he was in his element when telling and listening to sea yarns. He seemed to be more interested in "Big Ships" than the mosquito craft of the Royal Navy, and his appointment to the battle cruiser, *H.M.S. Inflexible,* was to him a realisation of a great ambition. Whilst preparing for action and on duty as a gunnery officer a heavy sea was running, and he was the victim of a most unfortunate accident. A 60 lb. cordite charge in a metal case struck him and injured his ankle. This injury in itself was serious, but was again aggravated later by slipping on the boat deck in the following November of 1917. This, to his great sorrow, practically ended his naval days, for he was sent ashore to hospital and eventually, after several years on crutches, was invalided out of the Service and placed on the retired list. During this long period of treatment and suffering he realised that he could not continue in the Service, and turned his mind to the medical profession. He prepared himself to enter Guy's, and in 1919, although still on crutches, he began his medical studies. In July, 1923, he took his first M.B. A further accident to his injured ankle necessitated a period of absence from the Hospital, extending to well over a year. In spite of this and shorter periods of enforced absences due to ill health he passed the 2nd Conjoint in March, 1926. It was now that he was able to realise his ambition to enter the wards. He was very keen on his work, and it was a cause of great sorrow to him that his ill health had so retarded his progress. He was always cheerful and ready to lend a hand to anyone, and his death is an irreparable loss to his many friends at Guy's which will always be felt.

A Memorial Service was held in the Chapel at Guy's on May 12th, 1927, at which it was gratifying to see so representative a gathering of his friends and colleagues, testifying the high esteem and respect which was held for this young and promising life which had been cut short at so young an age. The body was conveyed to his home at Harrow, from which the interment took place at Harrow Cemetery on Saturday, May 14th, 1927.

The floral tributes from the Hospital were sent by Mr. Turner and his Dressers, the Sister and her Nurses from Job Ward, the Clinical Students and the Students from the Medical School.

Mr. and Mrs. Paul Barendt and family are anxious to convey their heartfelt thanks for, and deep appreciation of, the tributes paid to the memory of their son, John Hugh Barendt, by members of Guy's Medical and Nursing Staff and his fellow students, alike at the Memorial Service and later at the funeral.

Bryden Glendining.

IT has probably not escaped the notice of his contemporaries that Bryden Glendining's death was announced a few days ago in *The Times.* With his passing there goes a great example of a contest carried on with fate, in which, although the result was inevitable, the duel was marked by courage, dignity and good humour.

How charming a personality he had none but those who knew him well could appreciate, and he was so convincing by reason of his capacity, wisdom and general resourcefulness. No one was ever more remote from meanness, humbug or pettiness than he. Those who knew Glendining in the opening of his career, which had as fair a promise as any man could expect or hope for, were aghast when they realised that he was doomed to a long, bitter and inevitable struggle, but to us who watched this it has been inspiring and ennobling. Glendining's life proved the existence of as definite a view of pure gold as human nature can demonstrate anywhere. Short though his career was and cruelly limited, the aroma of his life has dignified human existence.

A. W. O.

The Surgery of the Lung.

By Mr. GRAHAM CAMPBELL. Awarded the Treasurer's Prize, and read before the Guy's Hospital Physical Society on Thursday, April 14th, 1927.

Concluded.

I WILL now discuss four conditions which, either owing to their rarity or to their being unsuitable for operation, do not assume a great importance in this subject. These conditions are those of neoplasm, actinomycosis, echinococcus cysts and foreign body. Having finished these affections I will close this paper with a consideration of war time surgery as it affects the lungs.

Neoplasm of the lung is a rare condition, although it is now more common than it was about 40 years ago. In 1886 Fuchs collected 12,307 necropsies at Munich and stated that new growths of the lung only consisted of .06 per cent. of these cases. The percentage has now increased, and by the figures of Ewing made in 1922 it now comprises 1 per cent. of necropsies. It occurs more frequently in males than in females, Adler giving the ratio as 332 : 121.

The malignant new growths may be of varied types, being either a squamous-celled epithelioma, an adenocarcinoma, a lymphosarcoma, or they may contain a mixture of cells of various types. The tumours seldom project into the bronchi as papillomatous growths, nor does the patient even cough up pieces of the growth. Usually they lie peribronchially, under the bronchial mucosa and do not often slough out into the bronchial lumen. In those cases where they do ulcerate into a bronchus, the pus resulting is so foul and purulent that any growth coughed up is lost in it. Associated with the sputum in these cases are fevers, sweats and chills.

The growths were very conveniently classified by Seydel into :—

(i) Metastatic growths, which formed by far the largest group, consisting of about 85 per cent. of cases.

(ii) Growths which have extended to the lung from neighbouring tissues.

(iii) Primary growths.

Group (i) consists of hopeless cases, far too much tissue being involved, so that radical surgical treatment is not to be considered.

Group (ii) includes those growths which have resulted from extension from primary growths in the œsophagus, chest wall, thymus and mediastinum, and are rarely operable.

The last group alone can be considered to be operable, and not too optimistic a view should be taken even here.

Thus, we can confine this subject of malignant new growths with relation to surgery to the primary tumours. In these cases the symptoms may be divided into two classes. One class includes those due to tumours of the hilum or main bronchi, and the other to the more peripheral tumours.

The symptoms which are associated with the more centrally placed tumours are tracheal irritation, causing a distressing, barking, paroxysmal cough, together with the production of a little sputum. The peripheral tumours give rise to fever, a distressing cough and loss of weight.

Two useful aids to diagnosis are to be found in the X-ray apparatus and the bronchoscope, after the presence of a blood stained sputum with dense consolidation of the lung and pain has made one suspicious of a tumour.

Treatment is only of use in those cases where an early diagnosis has been made and where the primary lesion can be removed. Lilienthal advocates exploratory thoracotomy followed by lobectomy in those cases where it is considered necessary. When lobectomy is advised the cautery may be used to great advantage for the removal of the lesion.

Actinomycosis is generally to be found having the primary lesion located in the mouth or digestive tract, but in those cases in which the infection has been inhaled the primary focus will be found in the lung itself. It is, however, more often secondary to some abdominal focus. In the lung it tends to infiltrate all tissues and form cavities, thereby closely resembling tuberculosis.

The symptoms generally complained of are pain, cough, hæmoptysis, fever and loss of both weight and strength. The sputum is generally scanty and mucopurulent, but after an abscess has burst into a bronchus it resembles that of tuberculous disease, save that it contains no tubercle bacilli or elastic fibres.

In the early stages a diagnosis is never made until the ray fungus has been found in the sputum, but in the later stages it is more easily made when it involves the chest wall, and the presence of more

or less extensive areas of browning induration of the skin and retraction of the thoracic wall is characteristic of this lesion.

The only specimen of this lesion in a lung in the Gordon Museum, Guy's Hospital, is a section through the lower lobe of a lung showing several nodules of consolidated lung tissue about half-an-inch in diameter. In the recent state these nodules consisted of a soft central white area surrounded by a deep red zone. When these nodules are viewed microscopically the centre is seen to be made up of small round cells, in which are scattered numerous actinomyces. In the periphery of these nodules the alveoli of the lung are filled with the extravasated red blood curpuscles. The ideal treatment would be thoracotomy and the complete removal of the infected portion of lung, but owing to the difficulty in making an early diagnosis the opportunities for this treatment are rare. However, a combination of surgery and potassium iodide treatment has shown a few cures, Opokin and Rasumowsky showing 8 cures out of 57 cases treated thus.

Save for the liver, echinococcus cysts occur more frequently in the lung than in any other organ. It occurs more often in the lower lobe, and it used to be thought that it was secondary to a lesion in the liver. The cyst, by its gradual enlargement, compresses the lung and so displaces the heart, whilst at a later stage the chest wall may bulge as a result of great enlargement of the cyst. Dyspnœa on exertion followed later by an afebrile cough and blood-stained expectoration enable a diagnosis to be made, which is later confirmed by the presence of hooklets in the aspirated fluid. The method of treatment used some years ago was to stitch the cysts to the outer wall and to drain the contents.

Recently considerable work has been done on this subject, and Tuffier and Martin are definitely of the opinion that they are always secondary to a lesion in the liver. In order to supplement the old method of diagnosis we now use the X-rays, which show the cyst to have round, well-defined walls, and associated with this condition is a marked eosinophilia.

The most successful method of treatment has been that suggested by Delageniere of drawing the cyst to the surface, suturing it to the thoracic wall and, after protecting the pleura, of opening it. The most important point for its cure is that the endocyst must be removed.

Foreign bodies in the lung can be introduced in two ways, for they can either enter via the mouth or via the chest wall. The ones entering through the mouth may come to rest in a small bronchus, as also may the missile entering from the exterior through the chest wall. Thus, they may be removed by two methods—one by using the bronchoscope for those that lie in a bronchus, and the other by direct surgical treatment, as suggested by Duval, Marion or Mauclaire.

Of the bronchoscopic method nothing need be said, but a short review of the other three operations is necessary.

Duval advised a 10–12 cm. rib resection and the palpation of the lung after it had been exteriorised. The foreign body should be removed by the shortest route, after which the lung could be sutured and the wound closed without drainage.

Marion only performed a 4 or 5 cm. rib resection, and if the lung were not adherent to the parietal pleura he made it so by suture. He next incised the lung and, having located the foreign body by palpation, he introduced a clamp along the finger and removed the missile. The wound was packed for about four or five days, after which it could be safely unpacked and sutured.

Lastly, Mauclaire made a small incision, thrust a clamp into the lung and, under a fluoroscopic screen, he withdrew the foreign body, the parietal wound being sutured at the time of the operation.

Of these, Duval's method appears to be the best because the shortest route is taken through lung tissue in order to withdraw the foreign body.

This brings me to the last condition—that of wounds involving the lung, and particularly those occurring in war time.

Before the last war the next largest war which affected this country was the South African War, in which the mortality from chest wounds was the lowest on record. This was owing to the fact that the high-velocity, low calibre rifle was in use, and thus the wounds were not very severe. It was on account of this that at the beginning of the Great War our surgeons were of the opinion that the best treatment for wounds involving the lung was to leave them alone except where an empyema presented itself. At the outset active surgery was not allowed to take place anywhere near the front line, and so it was that these cases had to wait until they eventually arrived at the base before any treatment was meted out to them. On account of this delay some arrived too late for anything save conservative treatment.

The assumption that these cases should be left alone produced the advice given for the use of medical Officers in 1915 in the *Official Memorandum on the Treatment of Injuries in War*, an abstract of which is given below :—

" No doubt many men shot through the chest die in a few minutes, but many of those who live long enough to reach a Field Ambulance or a Clearing Station recover. . . . The most important

reatment of all is absolute rest in the recumbent or semi-recumbent position. . . . If the opening in the chest be large, so that air passes in and out during respiration, the skin around should be painted with iodine and the opening of the wound firmly closed with the antiseptic gauze held in position by strapping. . . . A third of a grain of morphia should be given subcutaneously as soon as possible. . . . The presence of hæmothorax is rather to be taken as an indication for non-interference . . . it is to be accepted that tapping a hæmothorax is never to be practised in the early days after a wound of the lung."

Should an empyema be present the advice given was that the portion of rib overlying it should be resected and the pleura drained.

If missiles were retained in the chest they should not be removed unless they happened to be loose inside the pleura and give rise to pain and discomfort.

As regards the mortality of chest wounds, thereby affecting the lungs, it is extremely hard to arrive at a definite answer. The fatal cases, however, may be considered under three headings. Those occurring :—

(i) On the field of battle.
(ii) In the forward medical units.
(iii) In the base medical units.

The mortality on the field of battle was very high for, although no figures were obtained on our side, Sauerbruch, on the German side, gives records of 300 dead examined on the field in which 112 —37 per cent.—were wounded in the chest.

These figures almost coincide with those of Loffler who in 1864 recorded 469 dead, of whom 29 per cent. had been wounded in the chest. A larger percentage was recorded in the New Zealand War of 1863, when there was a 50 per cent. mortality.

Thus, we can say that one-third of those killed in war are hit in the chest, and since the chest represents one-third of the target offered by a body these figures seem correct.

In the second class we find that in the Field Ambulances the mortality was 7 per cent., while at the Casualty Clearing Stations it was 15.9 per cent. The mortality occurring at the base was even still more accurate, and remained constant at 6 per cent. Therefore of the men who were wounded in the chest and who survived the battlefield, 30 per cent. died subsequently.

The surgeons were thus faced with the problems of the morbid anatomy of the chest wounds and to find out the causes of death or prolonged invalidism and to study the means of their cure. This was obviously impossible when they were kept so busy, but in 1916, when the fighting on the Somme was dying down, they had more time to devote to this work, and by this time vast improvements had taken place in the hospitals, their equipment and staff of nurses. The hospitals were also nearer the front line, so that the wounded were received a few hours after injury and could be detained sufficiently long to allow of proper investigation. Facilities were also available to conduct autopsies, and the combined efforts of the surgeons, physicians, radiologists and pathologists made great headway.

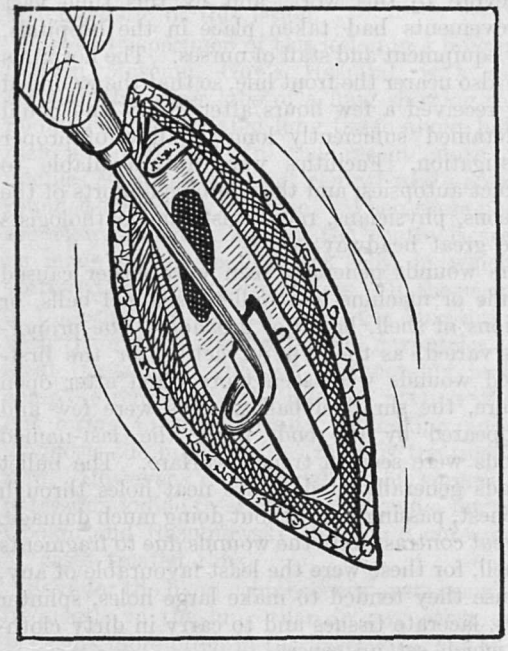
The wounds generally seen were either caused by rifle or machine gun bullets, shapnel balls, or portions of shell, bomb or grenade. The proportions varied, as the type of action for the first-named wounds were seen more often after open warfare, the shrapnel ball wounds were few and disappeared by the end, while the last-named wounds were seen in trench warfare. The bullet wounds generally made quite neat holes through the chest, passing out without doing much damage. In great contrast were the wounds due to fragments of shell, for these were the least favourable of any, because they tended to make large holes, splinter bones, lacerate tissues and to carry in dirty clothing, which set up sepsis.

The cause of death in the Casualty Clearing stations could be divided roughly into two classes. The first class contains those occurring within the first 36 hours, and the second class are those occurring later. The deaths which occurred during the first 36 hours were due to the severity of the injury, together with the shock and loss of blood, while those occurring later were due to sepsis of the pleura or contained viscera. This sepsis was due to the direct introduction by the missile of organisms, or by a portion of clothing or equipment carrying them in, whilst entrance could also be gained by infection through the wound in the chest wall.

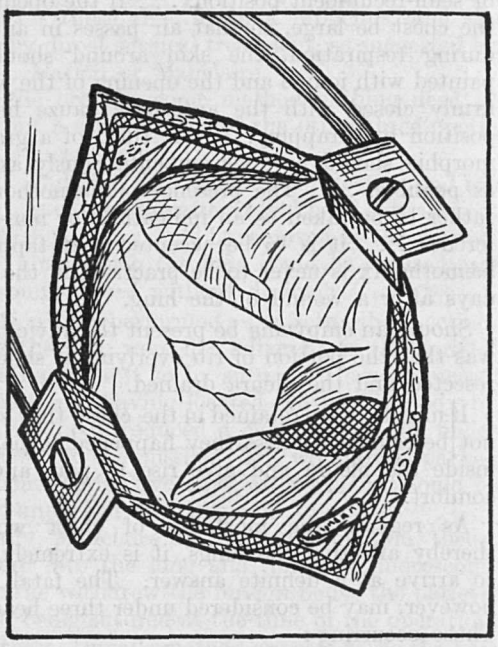
Thus, the surgeons next advised that early cleansing of the wound and injured viscera was necessary, with evacuation of all foreign bodies, repair and suture of the damaged lung and closure of the chest wall. If the tissue was damaged and devitalised it should be excised and the wound closed either by primary or delayed primary suture.

The choice of anæsthetics was an open question ; the French surgeons generally used ether, the Americans used gas and oxygen, whilst the British were divided between using chloroform, either alone or with oxygen, through a Shipway's apparatus, and the use of local anæsthesia.

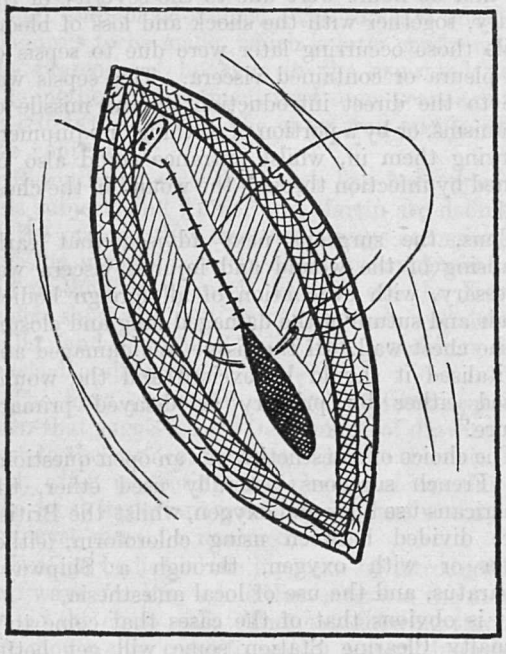
It is obvious that of the cases that come to a Casualty Clearing Station some will get better without an operation, others need one at once, whilst in the remainder it is a debatable point.



Soft parts excised down to the broken rib which is being lifted subperiostrally by means of Doyen's elevator.



Retractor in position. Small tear is seen on diaphragm.



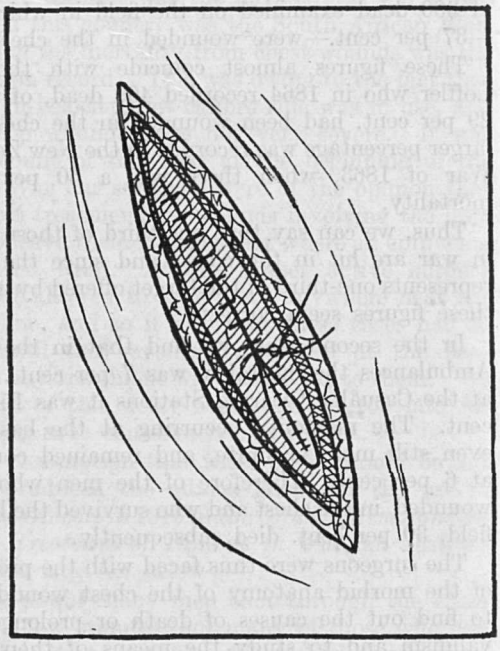


PLATE V.

Of those cases which need an immediate operation is one which Gask describes as one on which he did his first large thoracic operation during the late war. It was in 1916 that the case, a young Australian doctor, suffering from a large open wound over the lower part of the thorax and a retained missile, was seem by him. He decided to operate, and after having the patient anæsthetised with chloroform he opened the wound, excised about 4 inches of broken rib and opened widely the pleural cavity by means of a rib spreader. In the pleural cavity was found a shrapnel ball, a bit of rib and a large piece of khaki uniform. These were all removed, the tear in the lung sutured, the jagged ends of the ribs cut cleanly off, the cavity of the pleura cleaned free of blood and the chest was closed layer by layer. He recovered, the wound healing by first intention, the lung rapidly expanding once more and the pneumothorax gradually disappeared. His convalescence was short and he rejoined his unit very soon. Gask came across him again in 1917 when he was able to assure himself that the cure was permanent, both by his record and by clinical and X-ray examination. Had no operation been performed an empyema would certainly have appeared, necessitating an operation at a later date.

The great advance made during this time in treatment of wounds involving the lung is made manifest in the following extract from the last *Manual of Injuries and Diseases of War*, printed in 1918, as a guide to medical officers.

It proceeds thus :—

"*A*—Cases in which primary operation is indicated :

(i) A jagged wound of the soft parts.

(ii) Compound fracture of ribs.

(iii) Bleeding from the parietal wound and intercostal artery.

(iv) Pain.

(v) An open wound of the thorax through which air is pumped in and out of the pleural cavity.

(vi) Retention of a large foreign body in an accessible position.

"*B*—Cases which do not require primary operation :

(i) Small clean wounds, including through and through bullet wounds without evidence of serious intrathoracic injury other than hæmothorax.

(ii) Cases in which a missile is retained, which is only of small size.

(iii) Cases in which a missile, though of large size, is in a position difficult of access.

(iv) Cases of uninfected hæmothorax.

"*C*—Cases in which primary operation is contraindicated:

(i) Shock and collapse, such as would be contraindications for any surgical procedure.

(ii) Collapse of opposite lung."

Having decided that an operation is necessary it should be performed as soon as the initial shock has passed off and before sepsis has had time to establish itself. If 48 hours has elapsed between injury and time of proposed operation it is rarely worth operating save for evacuating an infected pleural sac.

The least that should be done is to excise the wound in order to prevent suppuration, this excision being carried right down to the ribs, which will frequently be found broken. The jagged ends of the involved ribs should be cut off and if an opening be found in the pleura a finger must be inserted and the lung examined for any spicules of bone that may be sticking into it. Any foreign body seen in the lung should be removed by one of the methods already described and the tear sutured. The blood should be evacuated from the pleural cavity by rolling the patient on to the affected side, the wound being closed layer by layer.

If a wider examination of the lung is required thoracotomy may be performed, a wide area being brought into view by excising about 10 cm. of rib or by making the incision through an intercostal space and inserting a rib-spreader. The route used will, of course, vary with the wound, but where it is possible to perform the thoracotomy through the wound this should be done. If this is not advisable owing to the missile having travelled far from the original wound, the best exposure is generally obtained by an incision in the fifth interspace in the mid or anterior axillary line. In this way the missile may be seen or, if not visible, may be palpated by inserting the hand.

When the lung has been badly wounded an early operation is advisable and the damaged tissue excised, any hæmorrhage being controlled by ligature. If the tissues are not clean they should be wiped out with a piece of gauze, the same being done with the pleural cavity, which should be left perfectly dry. The wound should then be sewn up in layers.

This work on the surgery of the lung and thoracic cavity was the greatest contribution made by surgeons, during the Great War, to military surgery.

A Note on Hæmorrhage.

By R. Cutler, L.D.S.

INTELLIGENT discussion regarding the ætiology of the various types of recurrent hæmorrhage calls for considerable academical and clinical knowledge. Consideration of the mechanical problems involved in the control of cases of dental hæmorrhage may, however, be of interest to the dental student, and possibly acceptable to the medical student in the Front Surgery, who is sometimes called upon to arrest hæmorrhage from tooth sockets when the Dental Department is closed.

Details of a rather unusual dental case, of some interest, are also appended, but it might first be more expedient to discuss the clinical aspects and general line of treatment of the average case which is referred to the Dental Department.

Post-extraction hæmorrhage—apart from that due to true hæmophilia or leukæmia—can be considered as being due to the co-existence of certain local mouth conditions, preventing or hindering clot formation, which normally forms a sterile plug to the mouth of the socket.

Chief of these conditions is, of course, sepsis, so that incidentally the notorious but still popular method of plugging the whole depth of the socket with gauze or other material is shown to be unsound in theory, as well as being pernicious in practice, in that it forms an ideal nidus for the further accumulation of bacteria. Moreover, even if the hæmorrhage is cured by this means, when the plug is removed an ugly breach is left in the continuity of the alveolus which takes a long period of time to be obliterated.

Modern practice is to make use of local pressure over the mouth of the socket only by means of a gauze pad or roll, which may or may not be impregnated with some hæmostatic drug. Such a principle forms an efficient control of hæmorrhage, while in no way interfering with the normal healing of the socket.

There are certain mechanical methods extant in obtaining and maintaining this local pressure, and these will be described. Even in mild cases, however, certain lines of general treatment should never be neglected.

The patient suffering from post-extraction hæmorrhage in the more acute forms, such as are seen in hospital practice, presents a very characteristic clinical picture. There is a history of an extraction some 24 or 48 hours previously and of a recurrence of bleeding some hours afterwards; there are signs of collapse and if the patient is a woman she is often lachrymose or hysterical. The mouth is sometimes full of half-formed, soft pedunculated clots, the breath is invariably foul, and there is usually nausea or retching, due to the swallowing of blood.

Before instituting general treatment the possibility of hæmophilia or leukæmia must first be eliminated. Hæmophilia would be disclosed by some definite personal or family history, while, of course, remembering that true hæmophilia hardly if ever occurs in the female. More rarely a leukæmic condition may be present; a blood film fixed by heat and stained with Leishmann or Giemsa (Goadby) would help in an otherwise difficult diagnosis for the dental surgeon.

If these are negative, at once assure the patient that the condition is not at all serious, and that it always responds to treatment.

Remove all blood clots and syringe the mouth with some pleasant deodorant mouth wash such as 1 per cent. carbolic in hot water. Combat collapse with spir. ammon. aromat., 1 dram. in 1 oz. of water, or brandy 2 c.c. injected submucously; diminish nausea with some gastric sedative such as

R/

Sod. bicarb. grs. 30.

Aquam ad. 1 oz. fiat haust.

Then examine the socket. If some large vessel is ruptured the treatment is obvious, namely, twisting the severed ends with artery forceps or electro cautery at dull red heat. Usually the socket looks perfectly normal except for a slow steady ooze of blood. Local pressure should now be applied, but the technique varies as to whether the tooth socket is isolated or whether it is bound on either side by a tooth.

In the first case two or three cotton wool rolls are taken, or alternatively a strip of cyanide gauze may be used. This should be about a foot long and folded back and forwards in one inch segments to form a saddle-shaped pad. It is then embedded in a small piece of warmed dental composition, which forms a roof-like casing to it, and serves to transmit pressure from opposing teeth or jaw.

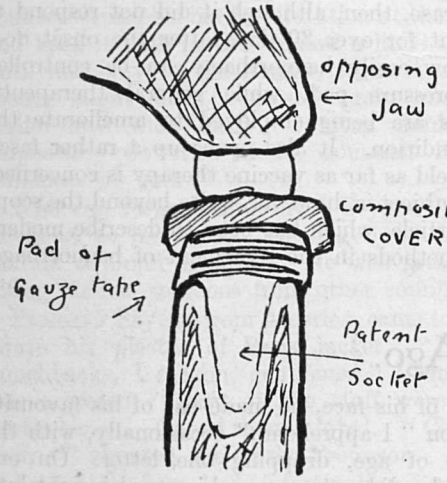
While the composition is still soft the pad is placed over the socket and the opposing teeth or jaw brought down into occlusion with the composition cover. The jaws are then immobilised with a "four tail" bandage.

This pad can be kept in position for 24 hours, when if necessary it can be renewed. It can be removed and replaced by the patient when food

is taken. Such an arrangement, while efficiently controlling the hæmorrhage, gives the patient a large measure of freedom.

When the socket is bounded on either side by a tooth a more convenient and equally efficient method is available. The pressure pad is prepared as before from a length of half inch cyanide gauze. A piece of orthodontic ligature wire—brass wire about 26 S.W.G.—about 8 inches long is then taken, and a small pair of artery forceps having been clipped on to it 1 inch from the end it is sterilised. The short end is then pushed beneath the contact point or behind the posterior surface of the distal tooth until it can be clipped from the inside, and drawn through until both ends are of equal length. These are then brought forward and crossed diagonally over the pad, which should now be placed in position. The free end now inside the mouth should be threaded through the contact point or round the mesial surface of the anterior tooth; it should then be twisted up tightly with the other free end, which lies on the outside of the anterior tooth.

This arrangement, while efficiently controlling hæmorrhage, gives the patient complete freedom, and if the pad is renewed daily, and an antiseptic mouth wash used, it in no way interferes with the normal closure of the socket.



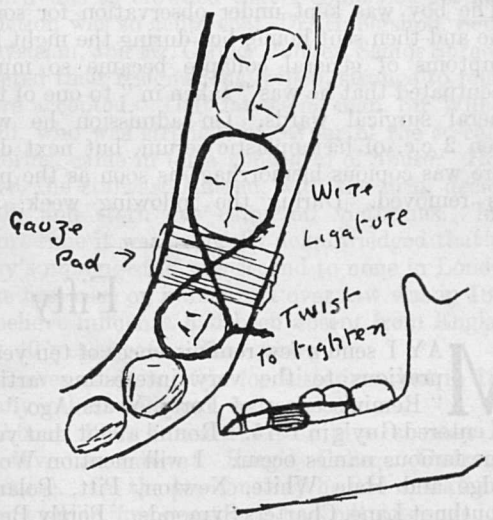
The diagrams may be of help in explaining the essential details of either operation.

In the unlikely event of the hæmorrhage not having ceased by the fifth or sixth day the question of instituting serum treatment must be considered. But this, of course, comes under the domain of the physician. The use of proprietary hæmostatic preparations like "Hæmoplastin" are, however, quite safe in the hands of the dental surgeon, and some consider that injections up to 2 c.c. are useful from the outset.

Opinion is divided as to the relative merits of the various styptics, which may very expediently be used by impregnating the pressure pad, before it is placed in position. Adrenalin chloride solution appears to be popular, but it is uncertain in action and does not inhibit sepsis. The various inorganic iron compounds also suffer from the same defects, while their use appears to be inimical to the healing of the socket. Turpentine (Ol. Terebinth B.P.) is of considerable value; it has a pronounced styptic action and, being antiseptic, aids the normal healing. It is slightly caustic, however, and unless carefully used may excoriate the delicate mucous membranes

A very reliable organic preparation is "Protagulin," a substance derived from sheep's blood, containing clotting ferments. It is supplied in small phials in powder form. Sufficient water should be added to dissolve it, which renders it suitable for local application.

Doubleday strongly advises the use of plaster of paris, which in powder form is suitable for impregnating the pressure pad. The plaster may be heated to render it sterile, without detriment to its therapeutic properties. The extravasated blood serum from the socket appears to enter into combination with it, forcing a sterile mechanical seal. Subsequent sepsis, contingent upon its use, is, moreover, shown to be most unusual.



The use of this substance is at present based entirely on empirical grounds, although it is thought that the calcium content of the plaster may be of some significance. Practical experience proves this to be a most valuable drug, and one that has the added merit of being harmless and easy to obtain.

Having thus considered the principles of general and local treatment, a description of a clinical case may prove of interest.

H. C., æt. 18, first came under the care of Mr. H. Baylis. He had a history of recurrent hæmorrhage after tooth extraction three years before. This had necessitated serum treatment in hospital. Since then he had had another tooth extracted without any untoward sequelæ.

The boy's present trouble of severe toothache necessitated radical treatment, so that the tooth was extracted with full aseptic precautions. It was a lower left second premolar.

There was no undue hæmorrhage after the extraction, but late that night steady bleeding commenced from the socket. Mr. Baylis managed to see the boy and applied local pressure with a pad and four-tail bandage. This controlled the hæmorrhage, but as the boy's condition was poor it was considered advisable to refer him to the Dental Department for a consultation with the morning surgeon. When seen the next day the boy was rather collapsed; he had a subnormal temperature, quick thready pulse, with sickly pallor and cold clammy skin.

After an examination it was considered advisable to continue local pressure, and this was accomplished by means of a pressure pad impregnated with plaster of paris, and kept in position with a wire ligature, as has been described.

The boy was kept under observation for some time and then sent home, but during the night his symptoms of general collapse became so much accentuated that he was "taken in" to one of the general surgical wards. On admission he was given 2 c.c. of hæmoplastic serum, but next day there was copious hæmorrhage as soon as the pad was removed. During the following week, although the boy's condition improved enormously, bleeding recommenced whenever the pad was removed.

In the meantime his clotting time had been determined, and was found to be 2 min. 40 sec. (1 min. 35 sec. normal, Poulton). Apart from this the blood picture was normal, and as no true hæmophiliac history could be determined, expectant treatment was carried out during the next week, but without any material success. A bacteriological examination was then made, swabs being taken from the depth of the socket. The findings were as follows: "Streptococcus viridans, staphylococcus albus, streptococcus longus," these latter two obviously being contaminations. The viridans may be hæmolytic—it derives its name from the disintegration of blood media with formation of methæmoglobin, a green compound (Goadby)—and on the assumption that this was pathogenic, a vaccine was prepared.

During this period 2 c.c. injections of hæmoplastic serum were given, but these appeared to have no effect on the clotting time, which was again determined, and still found to be 2 min. 40. sec.

A preliminary desensitising dose—1 minim—of vaccine was given, and then, two days later, a full dose. Next day the pad was removed, there was no bleeding, and speedy resolution of the socket occurred without further trouble.

This case, then, although it did not respond to treatment for over 30 days after the onset does show how easily hæmorrhage can be controlled by a pressure pad, while general therapeutic measures are being employed to ameliorate the basic condition. It also opens up a rather fascinating field as far as vaccine therapy is concerned. Such a subject is, however, quite beyond the scope of this article, which has been to describe modern dental methods in the treatment of hæmorrhage.

Fifty Years Ago.

MAY I send a few reminiscences of ten years previous to the very interesting article "Reminiscences of Forty Years Ago"?

I entered Guy's in 1875. Round about that year some famous names occur. I will mention Wooldridge and Hale White, Newton, Pitt, Poland, Arbuthnot Lane, Charters Symonds. Portly Betts was in the Museum. I recall his raising his hands in horror on seeing a first year's man in a useful holland jacket: "Oh, dear! What are we coming to!"

Dr. Wilks was an interesting lecturer, or rather, talker. He was in the habit of fiddling about with a bit of string as, with a characteristic twist of one side of his face, he made use of his favourite expression "I apprehend," occasionally, with the privilege of age, dropping one letter. On one occasion he did not portray his usual insight into the future when, with some scorn and indignation, he said: "What's this I hear about the new-fangled term appendicitis? Typhlitis and perityphlitis seem to me to be good enough."

The last time I heard Wilks was when he gave, to a crowded audience, an introductory lecture some years after I left. Referring to the early death of Wooldridge he quoted: "Lycidas is dead; dead, ere his prime!" All present were thrilled with his touching impressiveness.

One can always recall Dr. Pavy with his hardy annual: "A tooth is composed of *Cwown,* neck and fang, or-r-r-r fangs."

Dr. Moxon was the best lecturer I have ever heard, making even Materia Medica interesting. He needed full attention; the least noise seemed to divert his thoughts. On one occasion in the Chemical Theatre there were moving of feet and whispering in the top benches. He looked once or twice in that direction with an ominous pause, but the noise was later resumed. This was too much for Moxon. He was speaking of making some syrup, "and, gentlemen, in this case, as in others"—looking at the top benches—"the scum, the scum-m floats to the top." He afterwards apologised to a deputation. He would have been surprised if an indignant voice had retorted: "And the dregs, sir, sink to the bottom."

I never could understand how that most interesting subject "forensic medicine" came off so badly in the hands of Dr. Stevenson, afterwards the world-renowned law officer. There were frequent interruptions and cat calls very often throughout the lecture.

Dr. Debus—who, I notice, made much impression on that great Guy's scholar Starling—was a very good lecturer on chemistry. I often watched his small neat figure in grey frock coat and shiny top hat. He would—keeping up the custom of his country—raise his hat in salutation at the corridor and keep it high in the air and a little advanced until half way to the library, when it would no sooner alight but be raised again and not to settle until the library. I often think of his emphatic "Cowstick Zoda, common Zalt and Zulphate of sink!"

Who can forget "Tommy" Bryant's repeated reference to his hero, "Healing by the first intention of John Hunter." He was great on inviting famous surgeons from other countries.

Professor Sayers, from America, came to demonstrate his plaster of Paris jacket. "No more hunchbacks, I reckon, gentlemen." The theatre was crowded. Many of the staff were on the lowest bench. One of them fainted. "Chuck him down!" shouted the burly Professor.

Arthur Durham had a fascinating personality. His long flexible fingers were much in evidence; he was a neat and bold operator. When I was his dresser I remember his telling us of a man with malignant disease going to an eminent surgeon for operation, which was refused on account of the danger.

The surgeon asked him if he had consulted anyone else and the patient told him "Mr. Durham, but he wouldn't operate." "Well," said the surgeon, "if Durham wouldn't operate, it's no good your going to anyone else." I was present when Durham removed the upper extremity, including the scapula. Unfortunately, the man died within 24 hours.

Davis Colley was an excellent draughtsman in chalk. He would appear so intent on the blackboard as to have little thought for his surroundings in the small space allotted. When he had finished a perfect drawing he would step back to view it and knock over the pointer; in stooping to pick up the pointer he would very nearly knock over the big blackboard.

As P.M. clerk I was one day washing out particularly offensive intestines by fixing on to the tap when, by some mischance, the bowel burst. Unfortunately, Dr. Goodhart came up in the nick of time to receive the full and horrid blast in his face. "I—I—*beg* your pardon, sir!" "Yes, yes," he spluttered, as he made for the towel, "but I am afraid that won't help me!"

It was in my time that the great and mighty nursing innovation came. Miss Burt, from Leicester, was appointed Matron, and set up a stringent set of rules. One was that dressers and ward clerks should be out of the Wards by a certain hour; another was that no extra nurse could go on duty unless with Matron's sanction.

A surgeon needed an extra nurse for a tracheotomy case, and this was refused. There was a big indignation meeting at Bridge House Hotel which was so crowded that I could not get near. Friction was so acute that Dr. Habershon, Senior Physician, and Mr. Cooper Forster, Senior Surgeon, offered their resignations, which, strange to relate, were accepted. That far-seeing man, Sir William Gull, who was strongly in favour of the so-called reforms, came in for a good deal of abuse. However, the stalwart Matron, with the firm, decided walk and stern eye came off victorious. In a short time it was generally acknowledged that the Guy's nursing staff was second to none in London. The first case on influenza I ever saw was in 1887. I believe influenza had been absent from England for 40 years before that year.

Howes alone went in for Listerism, but in 1879 many others followed suit.

About 1883 I heard Lister give a most impressive lecture at King's College Operating Theatre. On the previous day he had operated by supra pubic for stone, and had not proceeded far when he was startled by an unaccustomed odour. I shall never forget the impression of his words, "Gentlemen, it was carbolic acid." It appears that an over-zealous assistant had over-distended the bladder with carbolic solution, and it had given way in a weak part. We afterwards saw the patient in the ward. Musk had been administered

as a stimulant. The urine smelt of musk. "How long ago was the musk given, sister?" "About five minutes ago." "Remarkably quick transit!" And so thought the distinguished savant from Switzerland until a nurse came and said that the porringer had previously had some musk in it. A broad grin all round, beginning with Lister! I was present at Lister's funeral service in Westminster Abbey, and shall always remember the impressive solemnity of that occasion, especially *Peace, Perfect Peace.*

O. B. SHELSWELL.

Correspondence.

The Carbolic Spray.

SIR,—I must confess myself in error in face of the direct evidence of Dr. Douglas Turner, Mr. Mollison and Dr. Morton Palmer, but am somewhat impenitent, as it has enabled me to discover the answer to a question which has often been debated in my presence by Guy's men of my time.

It is clear that my memory was at fault when I wrote that I could not find a spray when I was Surgical Registrar; it must have been some years later. The spray depicted in your last issue is exactly like that now in the Museum of Antiques.

Yours faithfully,

C. H. FAGGE.

3, Devonshire Place,
Portland Place, W.
May 25th, 1927.

The Cause of Cancer.

DEAR SIR,—I think I have found the cause of cancer, and I am writing to cancer research people in several countries in the hope that this idea will be investigated.

I think a cancer growth is possible on any tissue where the blood is not circulating well and so is partly stagnant. This poisonous blood generates a simple microbe or organism, non-divisible, non-multiple, which is probably what you call the cancer cell. These cancer cells or microbes find the surrounding unhealthy tissue a suitable food, and so we get a malignant growth.

Bruises, warts, perhaps scar tissue or tissue which has been subject to continued pressure such as the lips from smoking or the nose from glasses would be likely bases for cancer. Stagnant blood in the bowels would breed them in large quantities, and if they find tissue which has been rendered unhealthy from the same cause, cancer is the result. This cancer cell or microbe I would call an amœba microbe.

The law of evolution applies everywhere. We have amœba in the animal world and so we may have them in the microbe world.

Stagnation is death, and the cancer microbe is deadly. Old people suffer from cancer more than the young; their circulation is not so good as the young.

Yours truly,

MRS. MARGARET WHITE.

2785, 29th Avenue West,
Vancouver, B.C., Canada.
May 5th.

(The above was accomplished by a request that it should be "broadcast."—ED.)

Reviews.

Interpreters of Nature. By Sir GEORGE NEWMAN, K.C.B., M.D., Hon. D.C.L., LL.D. Published by Messrs. Faber & Gwyer, Ltd. 12*s.* 6*d.*

THIS is a very pleasing book, written with much insight and learning, showing how several characters of different types have contributed not only in actual discoveries to medical knowledge but in the spirit which should animate the calling. Particularly is this brought out in the part devoted to Sir William Osler, whose influence extends over the world—a legacy for many years to come.

The book includes character analyses of Thomas Sydenham, Boerhaave, John Hunter, John Keats, Pasteur and Osler.

The part dealing with Pasteur is delightfully written, portraying an unusually attractive character, who even at the height of fame never lost his simplicity and homeliness.

To any one interested in the characters who have breathed life into the body of medicine this book cannot fail to be a joy.

Manual of Medicine. By A. S. Woodwark. 3rd Edition. Published by the Oxford University Press (Milford). *Price* 15*s.*

THIS book of 500 pages has been designed as a vade mecum for senior students and general practitioners, and its principal aim has been to present the whole field of medicine in tabular form. Diseases are classified strictly according to the physiological systems involved, and special sections at the end of the book are devoted to general and functional diseases of the nervous system, insanity and the acute specific fevers. The alimentary system is treated first, and the reader is plunged with startling abruptness into a tabulation of stomatitis. Little space is given to literary enbellishment and naked facts are everywhere hurled at the reader with the barest minimum of ceremony. But if the language is terse it is also very clear and definite, and the writer has succeeded in compressing a considerable wealth of knowledge into a comparatively small space. If the reader be an apathetic student we doubt whether his interest would be aroused, but if he is thirsting for knowledge, and especially if the tabular presentation of a subject appeals to him, he will find good hunting on every page. For a beginner it probably contains too many facts without sufficient explanation and diagrams and, further, it often fails to carry those clinical pictures of the onset, course and end results of disease which are so essential to the making of a good clinician. To us it would seem that the principal uses of this book are :—

(1) To enable a senior student to obtain a rapid birds'-eye view of the subject just before an examination.

(2) To afford a rapid means of looking up any particular fact or item of knowledge about which the student or practitioner might be in doubt. If, for example, he desired to know whether pain was an invariable symptom of acute nephritis the answer could be found in about one-quarter the time that would be required to unearth it from the ponderous literature of a large text book.

(3) To aid the practitioner in the differential diagnosis of obscure cases. If, for example, he is faced with a case of ascites or hepatic enlargement which does not belong to any of the common types, he would here have access in a few moments to a complete list of all the possible causes of those conditions.

Considerable space is allotted to treatment, and many practical details and prescriptions are given, and we welcome the detailed instructions for carrying out the more common investigations such as urea concentration and hepatic efficiency tests.

The chapters on diseases of the nervous system are brief and elementary, but have the great merit of lucidity and simplicity. The views expressed are for the most part orthodox, but the unqualified statement that " the prognosis of petit mal is less favourable than that of grand mal " is not justified by our experience. We are glad that insanity has at last come to be included in a manual of medicine, though we could have wished that the treatment of this important branch of the subject had been a little fuller.

On the whole, we should recommend this book as a valuable companion to a senior student, but we do not think that it can really serve as a substitute for the larger standard text books.

Applied Physiology. By Samson Wright. 1st Edition. Pp. 418. Published by the Oxford University Press (Milford). *Price* 15*s.*

THIS book is one for which there is a real need. It contains much information which could hitherto only be obtained by reading scattered papers in the numerous journals. Bringing these together in concise form it is a book which should attract not only the student of pure physiology but those who are commencing to apply their knowledge in the hospital wards. In those schools where the teaching of physiology is illustrated by clinical cases the book may with advantage be read in conjunction with such classes. It can also be heartily recommended to those who are about to sit for the final examinations in medicine.

The chapter on the nervous system is particularly good, and we note that due attention is paid to the strio-spinal system, in the account of which text books of physiology are particularly vague.

Perhaps in another edition a full description might be given of the actual technique employed in estimating basal metabolism, and even at the risk of increasing the size of the volume we think that the work merits a more attractive type of print. Doubtless this will be rectified in the next edition.

Lecithin and Allied Substances—The Lipins. By Hugh Maclean and Isa Smedley Maclean. Monographs on Biochemistry. 1927. Pp. 187, together with Bibliography and Index. Published by Longmans, Green & Co., Ltd. *Price* 10*s.* 6*d.*

THIS is the second edition of this well known monograph, and the authors are to be congratulated on their work. One could not have a better account of this important group of biochemical substances.

Probably in no section of biochemistry has so much been published as in connection with the

subject of this monograph. To estimate critically the value of this huge mass of published work is a very difficult task, which the present authors have carried out extraordinarily successfully. Anyone who contemplates taking up research in any branch of biochemistry would do well to read this monograph carefully so that he may profit by the awful example of so many who have not hesitated to draw conclusions concerning the nature and functions of substances which have subsequently been found to be impure.

Biochemical knowledge, while growing rapidly, is always in danger of being confused because of the difficulties with which biochemical research is attended. Apart from the difficulties, due to lack of experience or critical ability on the part of some workers, whose results seem to find easy publication, there will always remain the difficulties due to the nature of the material dealt with. The lipins themselves are examples of this, and it may be some consolation to have it made clear that they are not so complicated or so numerous as we believed a few years ago.

The chapter on the function of the lipins is particularly suggestive and well written. The few errors are of such minor importance as scarcely to be worthy of mention, while the complete bibliography is a very important feature of this excellent work.

Sport.

Tennis.

Junior Inter-Hospital Cup-Tie.

Guy's v. King's College.

THE 1st Round of the Junior Cup was played at Honor Oak Park on Wednesday, May 25th, and resulted in an easy victory for Guy's by 12 matches to 0, 3 matches being unplayed. In 4 out of the 6 singles there was no real test of the Guy's players, as the opposition was poor. Parker-Tupling, though beating his opponent very easily in straight sets, was not playing up to his best form He was missing a great many easy shots and was obviously upset by his opponent's refusal to hit the ball hard. However, he showed his usual persistence in returning balls that were apparently far out of his reach.

Peregrine, on the second court, was right at the top of his form, and could not miss anything. It is true that the opposition was not strong, but Peregrine was playing good tennis and using his judgment nicely. He does not hit the ball hard, but keeps a good length, places well, and, above all things, does not miss the "sitters." Kurtz did not have such an easy match, but won in straight sets after being led 2–5, and 0–40 in the second set —a very good performance. He was somewhat upset by the fact that his opponent, who was one of the two best singles players on the King's side, employed to a large extent the cut, which Kurtz himself favours very strongly. The latter has a very useful kicking service, which brings him many aces, and is a good volleyer. He still, however, has a lot to learn about the tactics of the game, and in this match he repeatedly lost points through lingering in the forbidden area of the court—between base line and service line.

Booker, on the fourth court, also had a close match. His opponent was very steady and consistently returned the ball, being content to leave it at that and trust that Booker would eventually drive out of court—which he only too frequently did! However, superior stroke play and bold tactics prevailed in the end, as they always should. Booker has some beautiful strokes and the right temperament for match play, but he must learn to control certain wild shots and to concentrate more on length than he does. He is also rather inclined to serve foot-faults.

Gaitskell played a very steady single and fully justified his inclusion in the team. His opponent did not extend him in the least, and he only needed to return the ball perseveringly into court, which he did with good length, in order to win points comfortably.

Much the same may be said of Housden's match, which the latter won very easily. Housden has a good service, with perhaps a rather strong tendency towards double faults, and a very effective cross court return from the left hand court, which is eminently successful in doubles. His volleying, however, is weak and he misses far too many easy returns. He is a very persistent singles player and quick about the court.

In the doubles Kurtz and Peregrine, who have played together a good deal, won both their matches comfortably and were not extended. Parker-Tupling and Housden constituted the Guy's second pair, playing together for the first time, and the experiment proved quite successful. Parker-Tupling played a much stronger game than he had done in his singles; he has not much variety of stroke but his play is always effective, and he knows the tactics of the game well. In the third pair Gilbert played with Booker in place of

Gaitskell. Gilbert is a very sound doubles player and has a nice style. He is inclined to be erratic, as was Booker in the first match, with the result that they lost the first set to the King's third pair. Later, however, they settled down and beat King's first pair convincingly, producing some very good stroke play.

Tupling beat Easton 6–2, 6–1.
Peregrine beat Cumings 6–0, 6–1.
Kurtz beat Snowball 6–2, 9–7.
Booker beat Sapewell 6–3, 6–4.
Gaitskell beat King 6–1, 6–1.
Housden beat Shepperd 6–1, 6–0.

Peregrine and Kurtz—
Beat Cumings and Sapewell 6–1, 6–3.
Beat Easton and Snowball 6–4, 6–3.

Tupling and Housden—
Beat Cumings and Sapewell 6–3, 6–1.
Beat Easton and Snowball 6–3, 6–2.

Booker and Gilbert—
Beat Cumings and Sapewell 6–2, 6–1.
Beat King and Shepperd 2–6, 6–0, 6–3.

Guy's 2nd VI v. London School of Economics 2nd VI.

THIS match, played at Honor Oak Park, on Saturday, May 21st, was intended as a "try out" for the Cup team. The result as such was disappointing, as our opponents were very weak.

Peregrine and Kurtz—
Beat Greenfield and Baker 6–0, 6–2.
Beat Van Pittins and Read 6–0, 6–1.
Beat Earland and Basch 6–4, 6–1.

Tupling and Housden—
Beat Greenfield and Baker 6–2, 6–0.
Beat Van Pittins and Read 6–1, 6–2.
Beat Earland and Basch 6–2, 6–2.

Booker andGilbert—
Beat Greenfield and Baker 6–0, 6–1.
Beat Van Pittins and Read 6–2, 6–0.
Beat Earland and Basch 6–2, 6–4.

Guy's v. Westminster Bank.

PLAYED at Norbury on Saturday, May 14th, and lost by 5 matches to 2. The Hospital were not at full strength, neither Trafford nor Van den Broucque being able to turn out. Our first pair only played one match, which they lost rather easily.

Arkles and Tupling had a very good match with Fox and Potinger, Arkles being as usual particularly active at the net. He should, however, endeavour to improve his service, which at the moment is very weak. Peregrine and Kurtz were inclined to be erratic and to tire rather easily.

Bruce-Pearson and Lomax—
Lost to Brook and Reid 1–6, 3–6.

Arkles and Tupling—
Lost to Le Roy and Bailey 1–6, 2–6.
Beat Fox and Potinger 6–8, 6–4, 8–6.
Beat Brook and Reid 6–4, 6–3.

Peregrine and Kurtz—
Lost to Le Roy and Bailey 6–8, 1–6.
Lost to Fox and Potinger 6–8, 0–6.
Lost to Brook and Reid 1–6, 1–6.

Athletic Club.

THE Committee of the Athletic Club regret that owing to the Posters concerning the forthcoming Annual Sports going to press early the printers were unable to add that Mrs. French had kindly accepted our invitation to present the prizes at the conclusion of the meeting.

In the English Inter-University Contest held at Leeds on May 20th–21st, Guy's representatives of the University of London were C. W. Harrison and W. Hertzog.

Harrison—1st in Quarter Mile Hurdles and 3rd in Quarter Mile Flat.

Hertzog—1st in Long Jump and 2nd in Throwing the Discus.

We offer them our hearty congratulations.

The University of London Inter-Collegiate Sports were held at Herne Hill Track on May 25th. The Guy's team must be congratulated on bringing back both the Rosebery and Thierry Cups to the College. C. W. Harrison made a new record for the 440 Hurdles, winning in 60 seconds. He also won the 440 Yards Flat. W. Hertzog won the Long Jump and the Shot; he also got seconds in the Hammer, Discus and the Javelin. Hertzog missed the "Individual" Lady Busk Cup to Stubbs, East London College, by 1 point. S. D. McClean just managed to win the 120 Yards Hurdles, and G. R. C. Druce got second in the High Jump.

Our Tug-of-War Team pulled extremely well to win that event.

Our Relay Team must also be congratulated; they all ran very well indeed, especially C. W. Harrison, whose final quarter mile was the race of the day.

Results

100 *Yards*—
1st, J. E. London, King's; 2nd, V. G. Matthews, University College; 3rd, F. C. Wright, School of Economics. 4 yds.; $10\frac{2}{5}$ secs.

220 *Yards*—
1st, J. E. London, King's; 2nd, V. G. Matthews, University College; 3rd, A. J. N. Fuller, Goldsmiths. $3\frac{1}{2}$ yds.; $23\frac{3}{5}$ secs.

440 *Yards*—
1st, C. W. Harrison, Guy's (holder); 2nd, W. F. Roberts, University College; 3rd, E. N. Finch, University College. 8 yds.; $53\frac{1}{5}$ secs.

880 *Yards*—

1st, J. G. Stubbs, East London; 2nd, A. W. Johnson, Birkbeck; 3rd, L. Downing, King's. 1½ yds.; 2 min. 3⅕ secs.

Mile—

1st, J. G. Stubbs, East London (holder); 2nd, A. W. Johnson, Birkbeck; 3rd, R. A. P. Hogbin, Guy's. 8 yds.; 4 min. 33⅘ sec.

120 *Yards Hurdles*—

1st, S. D. McClean, Guy's; 2nd, F. Roedelheim, King's; 3rd, G. J. W. Oddie, East London (holder). Inches; 17⅖ sec.

3 *Miles*—

1st, J. G. Stubbs, East London; 2nd, R. Ramsay, University College; 3rd, R. G. Zissell, Birkbeck. 15 yds.; 15 min. 47⅕ sec.

440 *Yards Hurdles*—

1st, C. W. Harrison, Guy's; 2nd, M. Cariapa, King's; 3rd, F. Roedelheim, King's. 20 yds.; 60 sec. (record).

Long Jump—

1st, W. Hertzog, Guy's (holder), 21 ft. 3½ in.; 2nd, R. W. Revans, University College, 21 ft. 2¼ in.; 3rd, J. W. Jessen, Dental Hospital, 21 ft. 1¾ in.

Putting the Shot—

1st, W. Hertzog, Guy's, 34 ft. 3 in.; 2nd, J. Middleton Stewart, University College, 33 ft. 6¼ in.; 3rd, J. W. Jessen, Dental Hospital, 33 ft. 4¼ in.

Tug-of-War—

Guy's beat King's by 2 pulls to 0.

Mile Relay (880, 2 *at* 220 *and* 440 *Yards*)—

1st, Guy's (holders), F. F. Kennedy, W. Hertzog, T. O. Garland; 2nd, University College, W. F. Roberts, L. E. Amlot, V. G. Matthews, A. G. Bonny; 3rd, King's, L. Dowing, T. V. Sheppard, J. E. London, J. Alexander. 2 yds.; 3 min. 50⅖ sec.

High Jump—

1st, J. E. London, King's, 5 ft. 10 in. (record); 2nd, G. R. C. Druce, Guy's, 5 ft. 7 in.; 3rd, J. W. Jessen, Dental Hospital, 5 ft. 5 in.

Throwing the Hammer—

1st, R. E. W. Butt, University, 96 ft.; 2nd, W. Hertzog, Guy's; 3rd, R. A. Leeming, University.

Throwing the Discus—

1st, A. W. Haddon, King's, 96 ft. 5½ in.; 2nd, W. Hertzog, Guy's (holder); 3rd, R. A. Leeming, University.

Throwing the Javelin—

1st, E. W. Dawson, University, 138 ft. 2 in.; 2nd, W. Hertzog, Guy's (holder); 3rd, A. B. Timmis, King's.

Pole Jump—

1st, G. J. W. Oddie, East London, 8½ ft.; 2nd, J. W. Roberts, School of Economics; R. A. Elliott, University.

Points Scoring—

Busk Cup (individual)—1st, Stubbs, 20 points; 2nd, Hertzog, 19. *Rosebery Cup* (team)—1st, Guy's, 48; 2nd, King's, 35; 3rd, University, 33. *Thierry* (team handicap)—1st, Guy's; 2nd, East London.

Everyone is reminded that the Sports take place at Honor Oak Park on Wednesday next, June 8th. Preliminaries will be run on Tuesday, June 7th. We hope to see a large number of spectators down there this year to help to make the meeting a success.

Swimming Club.

Guy's v. Dulwich Common.

AT Dulwich College, on Wednesday, May 18th, the Hospital beat the College in the Swimming and Diving by 33 points to 22 and in the Polo by 2–0.

Malone won the 120 Yards in good style in 92 seconds. He immediately followed this feat by winning the 60 Yards in 39⅘ seconds. de Gruchy then succeeded in swimming 1 length in 14⅘ seconds, this being ⅖ of a second lower than the existing school record.

The Plunging went to the College, Mason and Sketch tieing for first place at 51½ feet. Smith won the Diving for us, producing his best form this season, and then Malone, J. W. H. Jones, D. P. King and C. E. M. de Gruchy won the Relay.

The polo proved to be a good match, goals coming from J. W. H. Jones and C. E. M. de Gruchy. Harding showed some improvement; he is gaining the necessary experience, and O. M. H. Jones is learning to make good use of his opportunities.

Results

120 *Yards*—

1st, C. D. Malone; 2nd, J. W. H. Jones; 3rd, Bryson (Dulwich); 4th, Kanaar (Dulwich). Time, 92 secs.

60 *Yards*—

1st, C. D. Malone; 2nd, Olsen (Dulwich); 3rd, D. P. King; 4th, Mason (Dulwich). Time, 39⅘ secs.

30 *Yards*—

1st, C. E. M. de Gruchy; 2nd, J. W. H. Jones; 3rd, Crick (Dulwich); 4th, Buckle (Dulwich).

Plunging—

1st, Mason and Sketch tied, 51½ feet; 3rd, W. L. James; 4th, R. N. C. Smith.

Diving—

1st, R. N. C. Smith; 2nd, Crick (Dulwich); 3rd, Charles (Dulwich); 4th, W. L. James.

Water Polo—

Won 2–0.

Guy's Team—R. N. C. Smith; C. E. M. de Gruchy, T. L. Kark; C. D. Malone; E. M. Harding, J. W. H. Jones, O. M. H. Jones.

Guy's v. Monson S.C.

THIS match took place at Tonbridge Wells on Wednesday, May 11th, and was lost by 6–1. The team for an unknown reason struck one of those very bad patches when no one seems to be able to do anything right. The play was much more even than the score suggests, but our forwards were shooting at the stars instead of at the goal. Malone secured our only goal. When a team plays as it did on that occasion it is extremely difficult to criticise any individual player. However, J. W. H. Jones put in some ver yhard and useful work.

The Relay Race was won in good style by E. D. Malone, D. P. King, J. W. H. Jones and C. D. Malone.

The polo team consisted of R. N. C. Smith; C. E. M. de Gruchy, T. L. Kark; C. D. Malone, E. M. Harding, J. W. H. Jones and O. M. H. Jones.

Guy's v. Forest Hill S.C.

THIS match, which took place on Friday, May 13th, ended in a draw. A most satisfactory end to a very hard and even game. Play was fast and interesting, neither side being sure of the result till the whistle blew. C. A. Wakeford and J. W. H. Jones worked hard to good effect and received support from the rather erratic play of L. Brown. de Gruchy played a sound if not brilliant game at back, using his speed with good results.

Guy's Team—R. N. C. Smith; C. E. M. de Gruchy, C. A. Wakeford; L. Brown; R. L. Cautley, J. W. H. Jones (capt.), O. M. H. Jones.

Guy's v. Grafton S.C.

THE Hospital drew with the Grafton S.C. on Friday, May 20th, in a game that was splendidly contested from start to finish, at the Forest Hill Baths. On the whole the Hospital had out a team that was a few feet faster than their opponents, but this did not carry with it any great advantage, since throughout the game both sides, with one or two exceptions, were marking very keenly. It is necessary to admit that our team did make the fullest use of their opportunities. One is inclined to think that we should have won had we tried other tactics than "long shots." It is obvious that these last need much practice to be really effective and enter the goal instead of passing over it, but those members of the team, and luckily there are only one or two, who employ these tactics seem to believe that they are naturally, and without any practice at all, able to obtain goals. Until they learn better the number of goals in the "For" column will not stand as high as they might.

Grafton started with a rush and were very soon one goal ahead, as a result of a shot that Smith seemed to know very little about. Soon after this they scored again, but the Guy's team were meanwhile settling down, in evidence of which Theis scored a goal as a result of some short and clever passing among the team. However, Theis deserves credit for what was really a very good goal.

At half time we were still one down, but the play was confined to our opponents' half, and O. M. H. Jones soon made things level in the matter of goals. His goal was really a masterpiece in the art of quick recovery, but it is true that his first attempt to score was very weak. However, a rebound off the crossbar brought the ball back in reach and the next one saw was a splash and the ball in the goal. From that time to the end hard play with no further score ensued, and the whistle left the game drawn at 2–2.

Guy's Team—R. N. C. Smith; C. E. de Gruchy, C. D. Malone; L. Brown; S. E. Theis, J. W. H. Jones (capt.), O. M. H. Jones.

Guy's v. Brighton College.

AT Brighton on Saturday, May 21st, the Hospital lost a swimming match, but won a water polo match, and thus stood easy on the day's play. In a bath that was obviously "slow," Malone won the 100 Yards from J. W. H. Jones by just a touch in $66\frac{1}{5}$ seconds. de Gruchy then won the 50 Yards from Dutfield of Brighton in $28\frac{3}{5}$ seconds. J. S. Crowther won the Diving for the College, whilst W. L. James came a good second, and we lost a 6-Length Relay by $1\frac{3}{5}$ seconds, and thus lost the Swimming by 18 points to 16.

The polo proved to be of good class. Mr. Styer, an old Guy's man resident in Brighton and practising there, has been coaching the College water polo team, and has produced a team that is very much better than the average Public School team. The most remarkable feature of the game was Malone's bag of 5 goals, some of which were excellent efforts, and the rest what we expect of Malone. Three of the 5 were scored in the first half, but Kearton lobbed a "long shot" into goal, and demonstrated one variety of a correct attempt, so the score stood at 3–1 at half time. Soon after the recommencement of play Wheeler scored again for Brighton, and then Malone added 2 more goals for the Hospital. One of these resulted from a high pass from J. W. H. Jones which was deftly directed into the goal without the ball being stipped.

Swimming Results

100 *Yards*—

1st, C. D. Malone; 2nd, J. W. H. Jones; 3rd,

M. H. Wheeler (Brighton); 4th, M. Nango (Brighton). Time 66⅕ seconds. Points for 7, against 3.

50 *Yards*—

1st, C. E. M. de Gruchy; 2nd, H. T. Dutfield (Brighton); 3rd, C. E. Kearton (Brighton); 4th, D. P. King. Time 28⅗ seconds. Points for 5, against 5.

6 *Lengths Relay*—

Won by Brighton College. Time 80 seconds. Points for 9, against 4.

Guy's Team—J. W. H. Jones, C. D. Malone, C. E. M. de Gruchy, R. W. Stephenson, D. P. King, E. M. Harding.

Diving—

1st, J. S. Crowther (Brighton); 2nd, W. L. James; 3rd, R. I. P. Shankey (Brighton); 4th, R. W. Stephenson. Points for 3, against 7.

Total points: For 16, against 18.

Water Polo—

Result: Won 5–2.

Guy's Team—R. W. Stephenson; C. E. M. de Gruchy, T. L. Kark; L. Brown; C. D. Malone, J. W. H. Jones (capt.), O. M. H. Jones.

Hospital Information, etc.

Pass List.

Society of Apothecaries of London.

May, 1927

Midwifery

M. H. Rashwan

L.D.S.

First Professional Examination.

May, 1927

PART I

Dental Mechanics

T. L. Vaisey	S. W. Beales
D. S. Clogg	F. N. Corfe
A. T. de Villiers	W. F. H. Frost
A. H. Fuller	H. R. Heathcote
R. E. L. Jones	J. F. Lockwood
R. O. Murray	J. C. Read
P. R. Shepherd	A. W. G. Small
H. B. Thornton	A. L. Wraight
R. V. Hooper	

PART II

Dental Metallurgy

T. L. Vaisey	R. V. Hooper
H. M. Selmann	D. S. Wilson

PART III (*a*)

Anatomy and Physiology

F. H. E. Beckett	M. A. Freeman
A. H. Fuller	C. V. Harries
L. B. Hilton	S. E. Holms
R. E. L. Jones	C. L. Knight
J. C. McNeill	R. O. Murray
K. E. Pringle	H. M. Selmann
F. B. W. Sexton	E. K. Uren
W. J. Watson	D. S. H. Williams
W. R. J. Wood	T. D. Wren

PART III (*b*)

Dental Anatomy Physiology

C. A. W. Archer	V. G. Boyle
H. J. Cracknell	E. M. Douglas
C. N. Howitt	E. C. Irish
C. M. Leckie	V. R. Preen
R. Symmons	C. B. Williamson

The Services.

Royal Army Medical Corps.

Captain C. H. G. Penny to be Major (Prov.).

Appointments.

H. M. Worth, M.R.C.S., L.R.C.P., L.D.S., appointed Hon. Medical Radiologist, West London Hospital.

M. E. Shaw, M.D., appointed Assistant Physician West London Hospital.

Papers by Guy's Men.

T. Izod Bennett. M.D., F.R.C.P. The Medical Treatment of Cancer of the Stomach, *Lancet*, i, 1927, 1,092.

A. A. Osman, M.R.C.P. (1) Chronic Renal Diseases with Bony Changes, (2) Case for Diagnosis, *Proc. Roy. Soc. Med.*, xx, 1927, 1,041; *Clinical Sec.*, 49.

E. C. Hughes, O.B.E., M.Ch. Three Cases of Arthroplasty for Ankylosis of the Tempero-Mandibular Joint. *Ibid.*, 1,042; *Ibid.*, 50.

C. P. Symonds, M.D. Syringomyelia with Charcot's Shoulder, *Ibid.*, 1,043; *Ibid.*, 51.

—— Some Points in the Diagnosis and Localisation of Cerebral Abscess, *Ibid.*, 1,139; *Sec. Otology*, 41.

F. D. Saner, F.R.C.S. Case of Gastro-Enterostomy, *Ibid.*, 1,044 *Clinical Section*, 52.

C. C. Lambrinudi, F.R.C.S. Two Cases of Madelung's Deformity, *Ibid.*, 1,045; *Ibid.*, 53.

C. C. Worster-Drought, M.D. Intermittent Œdema of the Foot for Diagnosis, *Ibid.*, 1,046; *Ibid.*, 54.

H. W. Barber, M.B. (1) Case of Sarcoid, (2) Confluent Lichen Nitidus with Lesions on the Tongue, (3) Lupus Erythematosis of the Scalp, associated with Scars of Old Papulo-Necrotic Tuberculide Lesions and of Erythema Indurations on the Arms and Legs, *Ibid.*, 1,051, 1,052, 1,053; *Sec. Dermat.*, 67, 68, 69.

G. B. Dowling, M.B. (1) Epithelioma Adenoides Cysticum, (2) Ringworm of the Scalp Treated by Thallium Acetate Epilation, (3) Recurring Eruption, ? Artefact, *Ibid.*, 1,054, 1,055, 1,056; *Ibid.*, 70, 71, 72.

T. B. Layton, D.S.O., M.S. Tuberculosis of Larynx, *Ibid.*, 1,088; *Sec. Laryngology*, 22.

—— Facial Palsy Five Years after Injury, *Ibid.*, 1,138; *Sec. Otology*, 40.

C. Gill-Carey, F.R.C.S. Dysphagia for Three Months due to Foreign Body in the Œsophagus, *Ibid.*, 1,095; *Sec. Laryngology*, 22.

—— Spinal Accessory Facial Anastomosis for Facial Palsy during Acute Destruction of Labyrinth, *Ibid.* 1,138; *Sec. Otology*, 40.

—— Superficial Abscess of the Brain, *Ibid.*, 1,147; *Ibid.*, 49.

W. M. Mollison, M.Ch. Left-Sided Tempero-Sphenoidal Abscess with Aphasia, *Ibid.*, 1,147; *Ibid.*, 49.

—— Localised Non-Suppurative Encephalitis, *Ibid.* 1,148; *Ibid.*, 50.

—— Loculated Cerebral Abscess, *Ibid.*, 115, x, *Ibid.*, 56.

W. H. Ogilvie, M.Ch. Superficial Abscess of the Brain, *Ibid.*, 1,147; *Ibid.*, 49.

EDS. { P.F.S.C. G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *June 18th, 1927.* *Number 1015*

PASSIM

THURSDAY, June 9th, saw the Park strangely transformed. From the early hours of the morning ruthless workmen had trampled down the newly sown grass (which the gardeners had for months been endeavouring to bring to that state of perfection worthy of their kind), and had covered other portions of it with hastily erected stalls. We, who had left the Hospital late the previous evening, were surprised at the speed at which bandstands were made, tents erected and the Park and Colonnade transformed so that even the Staff themselves could scarcely recognise it.

At 2.45 p.m. the Lady Mayoress, accompanied by the Lord Mayor and their retinue, arrived in the Front Quadrangle, and once more the pavements rang with the prancing of the bays and the rattle of the carriage wheels, like they used to do in the days when members of the Staff arrived at the Hospital in their coach and fours. Proceeding to the south end of the Colonnade the Lady Mayoress, in a short but characteristic speech, declared the Fete open. The Treasurer of the Hospital, Mr. F. P. Whitbread, in proposing a vote of thanks to the Lady Mayoress said :—

"It is with the greatest pleasure that I now propose a vote of thanks to the Lady Mayoress for so kindly coming this afternoon to open our Fete.

"Lady Blades is not only one of the most charming and successful Lady Mayoresses that the Mansion House has known for many years, but she is also one of us, her husband, the Lord Mayor, having been for several years a Governor of the Hospital. For these reasons we are very grateful to her for sparing a short hour from her strenuous life in the City to help us in our endeavours to help our Hospital.

"Never has Guy's Hospital more needed help. We ended last year with a deficit of £24,000 on maintenance alone, and we are now deeply in debt. The patients of the Hospital are making extraordinary efforts to assist the Hospital by donations and regular yearly contributions, but the cost of modern scientific treatment is far beyond their means. We must get additional support from benefactors or annual subscribers unless the activities of the Hospital, which is already inadequate to the claims of the sick and suffering, are to be seriously curtailed. The public think of Guy's Hospital as a wealthy foundation. I want to take this opportunity of saying that it is not so by any means. Out of a total annual expenditure of about £150,000, only a third of that sum is assured from our endowments. The rest has to be provided annually by the charitable public.

"It is in these circumstances that the Ladies' Association, which was founded as long ago as 1895, has once more come to our aid by holding this fete, and to the Ladies' Association the Governors owe a deep debt of gratitude. Since its foundation in 1895 it has collected for the Hospital no less than £16,000, and has, in addition, provided countless numbers of garments for In-Patients and regular visitors and helpers in our Wards.

"I therefore want to take this opportunity of thanking you, Lady Blades, for your great kindness in adding to the attractions of this afternoon's gathering by your presence and interest, and I can only hope that what will be the greatest compliment to you will happen, namely, that many others will follow your example and become members of the Guy's Hospital Ladies' Association, to help the Hospital by sympathy, work and interest."

Following the opening ceremony, the Lady Mayoress, accompanied by the Lord Mayor, visited the various stalls in the grounds. We have been told that Sir Rowland Blades obtained 27 cocoanuts at the Cocoanut Shies, but we have grave doubts as to the veracity of this statement.

Arrival of Lady Mayoress at Guy's Hospital.

Every manner of article could be bought at the various stalls, and the numerous side shows, which were run by the students, did a roaring trade. We were exhorted to " walk the line " for a free ice, to contribute to an endless variety of raffles (hoping in our hearts that we would not win the two black kittens), and to try our luck in the Ascot Stakes. The latter race was run just after tea, and provided a thrilling exhibition of horse racing.

As a result of the energies of the Hospital Ladies' Association, so far £1,500 has been handed to the Treasurer of the Hospital. This brings the amount collected for the Hospital by this admirable institution, since its inauguration 30 years ago, to over £17,000. We feel that this is a worthy result of the labour so generously given by its members.

Of the £1,500 obtained at the Fete, £98 4*s.* 11*d.* was secured through the energies of the students. We feel that this is an opportune moment to point out that since 1921 the students have raised over £5,000 for the Hospital. The latest collection on London Bridge Station on Derby Day realised £200 16*s.* 6*d.*

While congratulating the Ladies' Association as a whole for the great success of their Fete, we wish to congratulate Mrs. and Dr. Hurst for their collection of £105, obtained by the raffle of their Doll's House, a photograph of which we reproduce in this number. This Doll's House was designed and made by Mrs. and Dr. Hurst, and those of our readers who were lucky enough to see it will agree that it was an extraordinary fine piece of work.

We hope that the success of the Fete this year will stimulate the Ladies' Association to further efforts in this direction in the near future.

We publish in this number a letter concerning the " ultra modernisation " of the Colonnade. We are entirely in agreement with the writer, and feel strongly that the beauties of the Colonnade are not intensified by the establishment of an automatic stamp machine. That such a machine is very useful we have no doubt, but we also think that a less prominent place should be given it—at the bottom of the ward steps, for example—and that the advertisements should be removed.

We have been asked to draw attention to the poor support that has been given recently to the Rifle Association. There are excellent facilities provided for the convenience of members, and several Competitions are held at Bisley during the season.

On July 8th the Medical School is celebrating the Centenary of Bright's publication of his great discovery of the disease which is now named after him.

In the forenoon of Friday, July 8th, Professor Aschoff, of Freiburg, will give a Pathological Demonstration and Professor Widal, of Paris, will give a Clinic on selected cases. In the afternoon the Bright Memorial Oration will be delivered by Dr. W. S. Thayer, Emeritus Professor of Medicine at the Johns Hopkins University, Baltimore. This Oration will take place in the Physiology Lecture Theatre.

The Earl of Balfour will preside, and after the Oration will present Memorial Medals to

Procession across Square.

Dr. Thayer, Professor Aschoff, Professor Widal and Sir John Rose Bradford, all of whom have helped to extend our knowledge of the disease which was first described by Richard Bright.

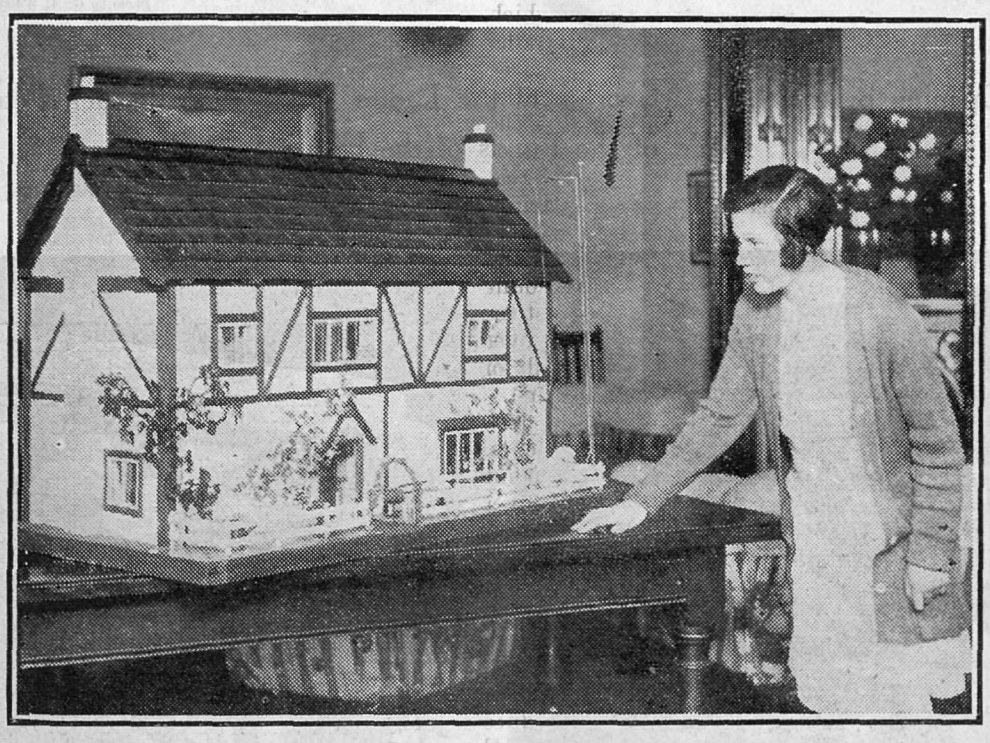
The demonstration and clinic in the morning are specially intended for students, who will also be admitted to the gallery for the Oration by ticket. Those students who desire to obtain tickets should give in their names at the Medical School Office, as it may be necessary to ballot for tickets.

MR. J. LEWIN PAYNE, O.B.E., has very kindly promised to present a Cup for a Dental Inter-Firm Tug-of-War Competition. Five firms will be eligible to compete, viz., the Dressers of each of the four Senior Dental Surgeons, together with those of the corresponding Assistant Surgeons, and the Dressers in the Children's Department.

The rules, which will be similar to those governing the Competition in the Medical side of the Hospital, will be announced later.

WE draw the attention of our readers to a letter from the British Medical Association published elsewhere, and setting out the opportunities offered by the Royal Army Medical Corps, following the adaptation of the suggestions of the British Medical Association, made to a Government Committee in 1926. The new conditions merit consideration of all newly qualified men, offering as they do a very fair remuneration and gratuities should officers desire to retire after a period of service ; also opportunities for post graduate study and research.

WE would draw the attention of our readers to the two notices in this issue which relate to the Bright Centenary Number of the *Guy's Hospital Reports*. This number of the *Reports* will be entirely devoted to the diseases of the kidney, and will contain the latest work on the ætiology, pathology and treatment of these diseases.



This Doll's House (designed and put together by Mrs. Hurst) secured £105 for the Ladies' Association Garden Fête Fund, in aid of Guy's Hospital.

(Photograph reproduced by kind permission of the Central News Agency and block presented by the "Daily Mirror.")

Photo by G. A. Walker.

Opening by the Lady Mayoress of the Ladies' Association Garden Fête in aid of the Funds of the Hospital,

Photo by G. A Walker.

June 9th, 1927

The Rotunda Hospital, Dublin.

A brief Account of a Month's Visit.

THE Rotunda Hospital, which is the largest lying-in hospital in Dublin, is situated in Parnell Street, at the north end of O'Connell Street, previously known as Sackville Street. The building is mostly very old, but contains one new wing—the Thomas Plunket Cairns' Wing, added a few years ago. At this point of the city lie the slums, and consequently the majority of the patients come from these quarters. Dublin has a population of some 500,000 people, whilst one-third of the families are occupiers of one room only. Estimating the average family of the poor as being six in number, it appeared as though one-half of the population belonged to this class.

The hospital was founded in 1745 by Dr. Bartholomew Mosse, and in 1756 it was incorporated by Royal Charter. The staff consists of a Master, appointed for seven years, this position now being filled by Dr. Bethel Solomons; two Assistant Masters, now being filled by Dr. N. M. Falkiner and Dr. W. H. Taylor; a pathologist and two clinical clerks. The senior clinical clerk is equivalent to our R.O., whilst the junior member is a combined ward clerk and anæsthetist, for he is responsible for testing urines, dressing, treating and inspecting from time to time such cases as circumcisions and breast abscesses.

The Hospital consists of 120 beds, 80 being reserved for midwifery cases and 40 for gynæcological cases. The average number of patients treated internally as midwifery cases is about 2,000, an equal number being treated as extern cases each year.

The wards are extremely small, containing only 10 beds in each, together with cots slung from the footposts, whilst on the walls are painted the coat-of-arms of families who have subscribed money to the Hospital. So old are these paintings that many of them are quite unrecognisable.

In this short account I will confine myself to the midwifery section of the Hospital, since this was the reason of the visit, although ample opportunity is given to study either midwifery or gynæcology.

On admission into hospital the patient in labour is taken into the Waiting Ward, which contains eight beds, and there she waits until the pains become strong, regular and frequent, when she is immediately transferred to the Labour Ward. This contains six beds, which are separated one from the other by means of a series of wires stretching from one wall to another, and from which curtains hang. About two hours after parturition the patient and child are removed to the Wards.

Students can palpate the abdomens of the patients in the Waiting Ward at any time, although the most convenient time is that set apart for this study at 8–9 p.m. The mess in which the students live is situated in the grounds of the Hospital, and by means of a system of bells connecting it with the Labour Ward warning is given when normal and abnormal cases are about to be delivered.

The bedrooms in the mess are considerably better than those in our own college, the food being about equal in quality, but there we had five substantial meals per day—breakfast, lunch, tea, dinner and supper—our last meal at 10 p.m.; the total charge for board and lodging being 2 guineas per week.

Besides being able to "take out" one's cases, both in the Hospital and out in the district, one was also able to attend the gynæcology class, the antenatal clinic and the infant dispensary, the latter being held on Tuesday afternoons by Dr. Crichton.

A time table of the routine work will demonstrate most clearly the efficiency of the course:—

Monday—
- 10 Lecture in Maternity Wards by the Master.
- 11 Gynæcological examinations, minor operations, and, when time permits, lecture.
- 2 Infants' Dispensary.
- 4 Antenatal Clinic.

Tuesday—
- 9 Major operations.
- 11.30 Lecture on Midwifery by Assistant Master.
- 2 Special Infants' Dispensary.

Wednesday—
- Same as Monday.

Thursday—
- Same as Tuesday until 2 p.m.
- 2 Infants' Dispensary.
- 4 Antenatal Clinic.

Friday—
- Same as Monday until 4 p.m.

It was interesting to note how the teaching differed from that at Guy's, and I think it would be fitting to include a few of these points.

The most striking thing we saw first was their method of delivery of the head in the case of an occipito-anterior position. The patient lies in the left lateral position, an assistant holding the right leg up so that the patient can press down with that leg. The patient bears down and the operator, on seeing the caput appear at the perineum, places his left hand over the patient's right leg and then between her legs, so that the fingers of that hand point now in the direction of the anal orifice. With the fingers slipping continually to the point where the perineum recedes off the head, pressure is applied so that the head is flexed, the operator remaining a one-handed man until the most anterior part of the anterior fontanelle is felt. Then, with a lump of sterilised tow in the right hand, the chin is felt for between the coccyx and the anal orifice. The woman is told to bear down no longer—some believe this to be of no value—and the head is delivered as slowly as possible by means of pressure on the chin with the right hand, the head being well flexed with the left hand fingers. This seems to be a much better method for preserving the perineum in an untorn state than is our method of using a sterile pad. When the perineum is torn, thus necessitating a stitch, should there follow sepsis and suppuration, it is advised that the stitches be removed and lint dipped in ichthyol applied. If there are sloughs present they should be wiped away and pure carbolic or silver nitrate applied. Later, after an interval of one week, it should be considered whether it is advisable to restitch, scraping the sides of the tear first in order to obtain healing.

We all know, of course, the Dublin treatment of eclampsia, but it would not be amiss to indicate the chief points in it again. The objects which this treatment aims at are :—

(i) *To get rid of the toxins from the body*—

This is done by means of stomach and colon washouts, starvation diet, large quantities of fluids to drink and, if the patient is unable to pass urine normally, catheterisation every six hours is advised.

(ii) *To get rid of or prevent the frequency of fits*—

Here morphia is used in half-grain doses, which may be repeated every two hours. Two grains may be given in the first 24 hours, but the patient's colour should be watched carefully. Thus, it is useful to nurse them in a good light.

(iii) *To prevent if possible cardiac failure and asphyxia, but should they occur to treat them*—

This demands careful nursing. The respirations should be watched. They may drop to six or eight per minute and may finally stop ; artificial respiration must then be performed. If cardiac symptoms arise cardiac stimulants must be administered. A rise in blood pressure or a fall in pulse rate are bad signs.

(iv) *To aid delivery when necessary*—

This is accomplished by rupturing the membranes or by the use of bougies, no anæsthetic being required for either. In the first case the os should be fully dilated.

In the method of application of forceps the Master is extremely keen that everyone should use the left lateral position, for with this position less assistance is necessary. The left hand is inserted half way into the vagina and the right hand holding the left blade firmly—in the position that one would hold a tennis racquet when doing a forehand drive, and not in the writing position—slips it into position. Keeping the hand still in the vagina the right blade is inserted in like manner and the blades locked, after making sure that only the head has been included in their grip. The forceps in use in the Hospital is the Barnes type fitted with the Neville axis-traction.

As regards Cæsarean section, the Master advises the use of the low segment operation for those cases where sepsis is likely to occur or where many vaginal examinations have been made. Two cases of this method were seen and it appeared to be an extremely difficult operation, whilst its advantage over the classical operation was not appreciated.

A very interesting case seen was that of a baby born in a taxi on the way to the Hospital, and which had melæna the following day. Blood was given to the child from the mother, but to no avail, and the baby died through severe loss of blood two days after birth. A post mortem examination was conducted, at which the cause of death was found to be a duodenal ulcer. Another interesting case seen was that in which a kidney was the obstructing factor to the passage of the fœtus.

During our stay in Dublin we had the privilege of attending at the Academy of Medicine to hear Dr. Gibbon Fitzgibbon read the last of his reports, that for November, 1925–November, 1926, on the work done in the Hospital. It was considered by those present to have been his best and a fitting end to his term of office there as Master.

We also heard at the same meeting a paper by Dr. Quin on "The Assistance of X-Rays in the Diagnosis of Intra-Uterine Death." In an extremely interesting paper he described how he was called in to see a woman suspected of having a dead fœtus in utero. The family doctor had seen her and thought that the uterus had increased in size according to her dates, but since a certain date he had been unable to detect the fœtal heart. An X-ray photograph was taken and this revealed overlapping of the bones of the calvarium—a definite diagnostic point. One such skiagram was exhibited, together with a normal one, and the difference was seen with conviction.

Our stay there proved instructive, interesting and enjoyable and, among other things, we were impressed mostly by :—

(i) The extreme poverty of their working class.

(ii) The bad housing accommodation, which was even worse than we see here in Bermondsey.

(iii) The excellent teaching in the Hospital for students and nurses.

(iv) The great number of abnormal cases seen with but very small mortality.

(v) The bell system. A similar system would be much welcomed in this Hospital so that students wishing to see cases could be given warning. In the Labour Ward at the Rotunda, a small five-tiered platform was provided for spectators, and upwards of 30 students could attend the delivery. One was encouraged there to see as many as one could.

(vi) The good accommodation and meals at a reasonable charge.

Those of us who were fortunate in spending this month in the Rotunda will ever remember it as being one of the most enjoyable month's work in our course.

GRAHAM C. CAMPBELL.

Three Cases of Osteomyelitis of the Mandible.

Clinical Lecture by Mr. E. C. HUGHES, M.Ch., F.R.C.S.

GENTLEMEN,—I have under my care at the present time three cases of extensive necrosis of the mandible. One of these cases has been attending the Hospital for four years, and the second and third for twelve months. All three cases had had some months of illness before coming to Guy's.

This prolonged treatment has been the result of inadequate attention in the early stages of the disease.

I show you here a photograph of a girl, aged 7, who had had a swollen face for six months before coming to hospital. The illness began with toothache and swelling of the right half of the mandible. Poultices were applied to the jaw for some weeks and eventually the pain subsided, though the swelling of the face had increased.

On admission the girl was in good general health, but she had a very obvious swelling of the right half of the face. This swelling extended over the right side of the body of the mandible, the angle and ascending ramus, and reached the temporal fossa. There were two fluctuating areas—one above and the other below the zygoma. Inside the right cheek, in the sulcus between gum and cheek, there was a sinus discharging pus, through which the dead portion of the mandible was felt.

The photograph shows another point, the midline of the mandible and the midline of the face do not coincide ; the mandible, as seen from the position of the chin, and the incisor teeth has swung over to the diseased side.

This deviation is due to the jaw being destroyed at a quicker rate than the new bone is being laid down, so that a moment comes when it cannot withstand the strains to which it is subjected, and it buckles or undergoes a spontaneous fracture.

This radiogram of the girl's jaw shows you the extensive disease from the molar region backwards and upwards to the coronoid fossa. The appearance is that of inflammation, with large areas of dead bone. You will see that the permanent tooth germs are in the middle of the inflamed area, and you can understand how frequently these germs must be cast out with the dead bone. The result of this will, of course, be that there will be no permanent teeth in this area.

Two large sequestra and a few smaller ones have been removed from this girl's jaw, but the sinus inside the mouth is not yet closed ; there is still a discharge of pus, her face is still swollen and the mandible still deviates to the diseased side, though this defect is being remedied by a splint.

The next case is that of a boy aged 9. He first came under my care when he was 5 years of age. and had then had a swollen face for some months. At the time of his first admission he had an enormously swollen right side of his face, a sinus in the sulcus between gum and cheek, discharging pus, and a spontaneous fracture of the diseased area. In fact, the case repeats all the features of the girl's case. He had, and continues to have, trismus, which is the only way in which he differs from the first case.

This boy is still coming here after more than four years of his disease ; the original inflammation has subsided, his sinus has closed, and the necrosis has come to an end. But this photograph shows (1) the asymmetry of the face, due to facial swelling, which still persists ; (2) the deviation of the jaw to the diseased side ; and (3) the very limited movement in the temporo-mandibular joint.

The third case is a girl aged 8, who has had exactly the same group of symptoms, as the other

two children. She has in addition an external sinus by the angle of the jaw on the diseased side.

These three cases have occurred in children as a result of sepsis from a tooth. Owing to the large amount of cancellous tissue in the mandible of a child, inflammation—if not given a free vent by extraction of a tooth—can spread with rapidity back to the angle, and up towards the coronoid and condylar processes.

Osteomyelitis of the mandible differs from the much more common disease in the long bones, for, in the latter, the organisms are conveyed to the bone by the blood stream, whereas in the mandible the organisms hardly ever get into the mandible in any other way than by the gum or tooth. The tooth most commonly at fault is either a temporary molar, or the first permanent molar.

The disease as it progresses causes considerable swelling of the affected side of the jaw and face, a sinus inside the mouth, and occasionally a sinus externally, spontaneous fracture, frequent loss of the permanent teeth over the affected region, and occasionally permanent limitation of movements of the temporo-mandibular joint, with consequent under-development of the mandible.

I want to dwell for a short time upon the limitation of movement in the temporo-mandibular joint which developed in the boy's case.

It is easy to imagine the disease spreading up towards the condylar process. Fortunately, the articular cartilage resists the spread of inflammation and generally keeps the joint intact. But, if the inflammation does enter the joint, there will result a bony ankylosis. It is possible, however, for limitation of movement to result in another way; the inflammation may spread from the mandible into the powerful muscles of mastication —in the first case the temporal fossa was swollen due to the inflammatory products having spread into the temporal muscle—and, as a consequence, these muscles will become inflamed and eventually may have a considerable amount of fibrous tissue in their substance, which will render their movements liable to considerable restriction.

The limitation of movements, then, may be due to a bony ankylosis in the joint, to a fibrosis of the masticatory muscles, or to both.

The boy, after four years of disease, showed considerable under-development of his mandible, and very restricted movements. To counteract these two deficiencies I excised his condylar process on the diseased side. Now, had the limitation of movement been due to ankylosis only, this procedure should have at once allowed movement to return. Unfortunately, the increase in jaw movements was barely appreciable, and I realised that I was dealing with a fibrosis of the masticatory muscles in addition to a bony ankylosis. I resected further the condylar process and the upper part of the ascending ramus, with a slight improvement in the movement, and I hope that with exercise the shortening of the masticatory muscles will be gradually overcome.

Had these cases been adequately treated in the first place by extraction of the offending tooth or teeth the inflammation would at once have been brought to an end.

But when the inflammation of a large area of bone is set up, recovery will be very slow. In treating such cases the likelihood of a spontaneous fracture must be borne in mind, and it will be advisable to work in collaboration with a dental colleague.

The dentist will anticipate the deviation of the jaw by using a splint fixed to the teeth, which will prevent the jaw swinging over, or, if the jaw has already suffered a spontaneous fracture, he will apply a splint to bring the jaw back again into its normal position. There is one other point in the treatment that I want to lay stress on, and that is the treatment of the persistent sinus in the mouth. In the early days of the sinus, large sequestra will be removed through the sinus without difficulty, but as the months pass by and the sinus still persists it is tempting to curette the sinus. This is wrong, for blind curetting removes living bony tissue and frequently spreads infection in sound bone. In all these cases of chronic sinuses, it is necessary to have radiographs of the jaw to show the number, size and position of the sequestra. The operation for the removal of the latter can be carried out with precision after the examination of the radiograph.

Notice.

Supplement to Bright Centenary Number, Guy's Hospital Reports.

A SPECIAL Supplement to the Bright Centenary Number of the *Guy's Hospital Reports*, containing a condensed reprint of Sir William Hale-White's papers on "Bright and His Discoveries," which were published in 1921 in Volume LXXI of the *Reports*, will be issued on July 8th, 1927. It contains a portrait of Bright, a coloured reproduction of the picture of the kidneys of the first recorded case of Bright's Disease from his *Medical Cases*, and a *facsimile* of the title page and dedication to the latter. Copies can be obtained from the Librarian, Guy's Hospital, London, S.E., price 2*s*. 6*d*.

Cases from the Ear and Throat Department.

A Case of Pulmonary Infarcts following Operation on the Mastoid. Intravenous Injections of Mercurochrome. Recovery. By S. T. Williamson.

THE patient, Rose P——, aged 38, was admitted, on October 5th, 1926, to Dorcas Ward, under Mr. Mollison, on account of left sided chronic suppurative otitis media with polypus formation.

The patient suffered from measles as a child, and stated that otorrhœa began at that time and has persisted since ; she had suffered from frequent headaches. She had attended other hospitals as well as Guy's regularly.

In April, 1926, hæmorrhage occurred from the left ear, and the patient had severe daily headaches. She attended in the Out-Patient Department and operation was advised. She attended on and off till admission. On admission there was present a discharge of foul gas from the left ear and in the meatus was a large polypus. The temperature was 99°, pulse 100.

On October 7th the radical mastoid operation was performed. On account of unusually free hæmorrhage no skin graft was used, though a meatal flap was cut. Two days after operation the temperature rose to 103.8° and the patient developed a cough. The following day she had a rigor and the temperature rose to 105°. Swelling about the upper end of the left sterno-mastoid was noticed, and in 24 hours pus was found on opening the lower end of the mastoid wound. The patient complained of pain in the chest and dyspnœa.

Two days later, on October 11th, patient had another rigor, temperature 101.4°, and thereafter periodic rises of temperature every three days.

On October 29th patient had acute pain in the chest, followed by hæmoptysis, and on auscultation a rub was heard at the inferior angle of the right scapula. Dr. Marshall saw the patient the following day and found " signs of dry pleurisy in the right chest ; no indications of phthisis," and suggested a small infarct from a thrombosed vein.

It may be added here that there were no local evidences of lateral sinus thrombosis. Two days later Dr. Eyre saw the patient with a view to injection of mercurochrome. He took a sample of blood for cultivation, but this remained sterile after seven days' incubation. Dr. Eyre gave 10 c.c. of 10 per cent. solution of mercurochrome, intravenously. The temperature fell somewhat, but on November 12th rose again to 101° and the pulse rate increased.

A further dose was given on November 13th and the temperature again fell to rise again.

November 18th, a further dose of 10 c.c. mercurochrome given. After this the temperature fell and the patient gradually recovered.

The patient was discharged in December ; the mastoid and abscess wounds healed, though some discharge still from the ear. The chest sounds were normal.

(*Note*—Infarct of the lung is a rare complication of a mastoid operation, apart from lateral sinus thrombosis. Since there was no thrombosis it is suggested that infection took place through small veins in the wall of the abscess about the sterno-mastoid muscle on its deep aspect.)

The patient was extremely ill for several weeks, apparently due to severe toxæmia, in addition to the local lung condition and there seemed very little hope of recovery. It is believed that the intravenous administration of mercurochrome saved her life.

A Case of Meningeal Cyst. Operation. Recovery. By H. I. Maister.

INTRACRANIAL complications, following radical mastoidectomy, are sufficiently uncommon to warrant the publication of the history of this case.

Miss M——, aged 30, dates her story back to 1921, when a radical mastoidectomy was performed on her left ear. In July of the following year Mr. Mollison performed a radical operation on her right ear. She was readmitted in September, 1923, complaining of pain in her left ear. The wound was reopened and the dura mater of the middle fossa exposed, but no pus was found and the patient was relieved.

Until July, 1926, she remained free from ear trouble, but then she reattended Mr. Mollison's Out-Patient Department complaining of vertigo and slight loss of weight. Her ear condition was then reported to be : Old right radical, fair ; old left radical, dry. Subsequently she was watched by her doctor and at Out-Patients. The loss of weight continued and some tremor of her hands was noticed. At about the same time that she

noticed the vertigo she began to vomit, usually in the mornings, at first at irregular intervals but, as time went on, more frequently.

At the beginning of April of this year headaches and pain in the region of her right ear made their appearance. She consulted her doctor and on her way home after a visit had a "fit," remaining unconscious for some time. She was put to bed and has remained there since. In the week before admission the cerebral symptoms became aggravated, the headache being intense. Her cerebration became impaired and her speech slow and hesitating.

On April 25th she was readmitted into Dorcas under Mr. Mollison complaining of pain in the right side of the head, headache and drowsiness.

Her colour was good, but her tongue was furred and dirty and sordes were present on her lips. She was decidedly drowsy and answered questions slowly and with some hesitation.

Pulse 100; respiration 20; temperature 99°.

The left radical cavity was dry, but in the right there was a small amount of pus and some granulations towards the tegmen tympani. Her hearing was good in the right ear.

Her pupils were equal in size and reacted equally to light. Slow nystagmus was present and more marked on looking to the left. There was some inco-ordination in the movements of the right arm. Both knee jerks were brisk and the plantar reflexes flexor.

On lumbar puncture the cerebrospinal fluid was clear, but under increased pressure. Examination showed no abnormal cytological or chemical changes.

Mr. Mollison reopened the right radical cavity on the night of her admission. The dura mater of the middle fossa was exposed, but there was no undue pressure nor abnormal pulsation noted. The wall of the lateral sinus was exposed and was found to be healthy. After exposure of the posterior fossa in front of the sinus the dura was found to be under slightly increased tension, but pulsation was present. Its surface was carbolised and after making a crucial incision, cerebrospinal fluid emerged in large quantity, but no brain appeared. Further exploration revealed a cystic cavity filled with clear cerebrospinal fluid. The cerebellum could be seen at a distance of three-quarters of an inch internal to the surface of the dura. No further exploration was made; the wound was closed and a rubber drain inserted.

During the next few days the patient's condition was apparently unaltered; she still remained in her drowsy condition, was unable to retain solid food and fluids only with difficulty. The vomiting, however, gradually decreased in frequency, but it was not until Saturday, April 30th, that there was any evident change in her mental condition. By the next day the patient had undergone a remarkable metamorphosis from a drowsy and ill to an alert, rapidly improving patient. Since then the improvement has been maintained and the patient states she has never felt so well for years.

In conclusion, I should like to thank Mr. Mollison for permission to publish this case.

Bright Centenary Number of Guy's Hospital Reports.

THE July number of the *Guy's Hospital Reports* will form a special Bright Centenary number. It can be ordered by non-subscribers, price 12*s.* 6*d.*, from the Publishers, *The Lancet, Ltd.*, 1, Bedford Street, Strand, W.C.2.

It will contain the following papers:—

The Bright Oration. By W. H. Thayer, M.D., Emeritus Professor of Medicine, Johns Hopkins University, Baltimore.

Two Cases of Bright's Disease: a Clinical Demonstration. By H. Widal, Professor of Medicine, Paris.

The Pathology of Bright's Disease. By H. Aschoff, Professor of Pathology, Freiburg.

Some Notes on Uræmia. By Sir John Rose Bradford, K.C.M.G., M.D., F.R.S., President of the College of Physicians.

Starling's Work on the Physiology of the Kidneys. By M. S. Pembrey, M.D., F.R.S.

Bright's Earliest Published Paper. By Sir William Hale-White, K.B.E., M.D.

The Treatment of Nephritis with Alkalies. By A. A. Osman, M.R.C.P.

Excretory Functions of the Kidney. By J. H. Ryffel, B.Ch.

Syphilitic Nephritis. By G. B. Dowling, M.D.

The Treatment of Chronic Bright's Disease by Decapsulation. By John Fawcett, M.D.

The Association of Chronic Bright's Disease with Obstruction in the Lower Urinary Tract. By A. R. Thompson, Ch.M.

Ocular Changes in Bright's Disease. By O. Gayer Morgan, M.Ch.

Dermatological Symptoms in Bright's Disease. By H. W. Barber, M.D.

The Tonsils in Nephritis. By W. M. Mollison, M.Ch.

A Case of Nephritis Treated by Tonsillectomy. By A. C. Jepson, B.Ch.

Enuresis Nocturna. By H. C. Cameron, M.D.

Mental Symptoms in Bright's Disease. By R. D. Gillespie, M.D.

Malformation of the Kidney and Development. By G. W. Nicholson, M.D.

The Total Eclipse of the Sun.

EARLY in the morning of Wednesday, June 29th, the sun will be totally eclipsed—and that will be the first time that that has happened to it in this country for over 200 years. The last total eclipse of the sun in England—in 1714—was seen by Sir Isaac Newton, and the next one, in 1999, is not likely to be seen by many of us. The eclipse, as a total eclipse, will unfortunately not be visible from London. If you want to see it you must go north to some place on a strip of country, 30 miles broad, that stretches from Criccieth via Southport and Settle to Hartlepool.

A solar eclipse, of course, occurs when the moon gets in between ourselves and the sun. Owing to the slight tilt of the moon's path to that of the earth round the sun, this does not happen, as one might expect, once in each revolution of the moon round the earth—once, in fact, every 28 days. Generally, the moon misses the sun, passing either a little above or below it.

However, at least twice in a year, and maybe as often as five times in a year, there must be some sort of solar eclipse. Most of such eclipses are partial ones, and only a few of them are visible from any particular place on the earth. But a total eclipse is a much rarer event; only one in every three years (on the average) is visible from *some* place on the earth—and that place is usually very far distant from any particular spot.

There are three sorts of eclipses. A partial eclipse happens when the moon passes over a *part* of the sun. An annular eclipse happens when the moon is at its furthest from, and the sun at its nearest to, us; for then the moon, as seen in the sky, looks smaller than the sun, and so, if it passes centrally across the sun, it leaves uncovered a narrow "annulus" or ring of the sun's disc. A total eclipse happens when the distances of the sun and moon from us are such that the moon appears large enough completely to cover the sun, and when at the same time the moon crosses over the sun centrally. If the two bodies happen at the time to appear equal in size, the total eclipse will be practically an instantaneous event, but if the moon is at its nearest to, and the sun at its furthest from, us then the total eclipse may last as long as $7\frac{1}{2}$ minutes. Total eclipses, of course, are only visible from a comparatively narrow belt of country; from a much larger area surrounding that belt the eclipse will be seen as a partial eclipse of greater or smaller degree.

Thus you will see that total eclipses are not only "few and far between," but also extremely "short and sweet." That is why there is so much ado about them; why expensive expeditions carrying valuable and cumbersome apparatus are sent from all the ends of the earth to some very distant and perhaps almost inacessible corner of it, merely for the purpose of studying an event which occupies at the most a few minutes and depends entirely on the weather for its visibility.

And why do they do these strange things, these astronomers? Why do they go out to study the sun from a place at which they know it will be invisible? The explanation is that the sun which you see is not the whole sun—it is merely the core of a far more extensive structure. The core may be nearly a million miles in diameter, but the superstructure around it extends outwards from it to four, five, perhaps ten millions of miles. And this superstructure is always hidden from sight by the glare of the sky; it only becomes visible during those few brief minutes of total eclipse.

The superstructure of the sun consists, broadly, of two layers—the *chromosphere*, which forms the solar atmosphere proper, and the *corona*, which is a vast and highly rarified envelope of fine dust, and luminous gases unknown on the earth.

The lowest layer of the chromosphere is called the *reversing layer*. It is composed of glowing incandescent gases at extremely high temperatures and is entirely responsible for those dark Framhope lines in the solar spectrum that you may see any day in Dr. Ryffel's laboratory—it is a layer about 200 miles deep. The upper layers of the chromosphere, much thicker than the reversing layer, consist of the lighter gases such as hydrogen, and from these layers there shoot up periodically to a height of perhaps 100,000 miles those flame-like projections of incandescent hydrogen called the *prominences*.

Until 1868 the chromosphere and prominences could only be seen during a total eclipse, but in that year a method was discovered by which they could be watched with a spectroscope on any fine day. Nowadays the prominences are photographed daily at many observatories. They are very beautiful things to watch. Sometimes they may shoot up in the space of an hour to over 100,000 miles. They may resemble rockets, or look like great pyramids or branching trees of flame. Sometimes they fall over in graceful curves sinking back again into the chromosphere; at other times they become detached and float like great clouds for days above the sun's atmosphere.

At this eclipse you will probably—during totality—see one or more of these prominences or small pinkish or orange projections from behind the

moon's edge *with the naked eye*. But if, "prominently" speaking, it happens to be a *quiet* day, you will be certain to see a few of them with a good opera glass.

The thing, however, which you go *really* out for to see is the corona—that which no device on earth has ever rendered visible except during a total eclipse. It is a halo of bluish-white or greenish light that surrounds the eclipsed sun to a distance from its edge of many times its diameter. It is brightest in its lowest layers and fades off rapidly at greater distances from the sun. The shape and form varies from one eclipse to another, but they bear a close relation to the eleven-year cycle in which sunspots wax and wane. At sunspot minimum short plumes of coronal matter diverge from the sun's two poles, like iron filings about a magnet; whereas the outer extensions of the corona become arranged in two great equatorial wings. At sunspot maximum, as at the coming eclipse, the corona is at its brightest, and both the short plumes and the long extending streamers occupy positions more or less at random as regards the solar poles and equator, but nevertheless definitely connected with underlying disturbed areas such as sunspots and prominences.

Now, although the corona at this eclipse is a maximum, and therefore a bright, corona, there will be certain "snags" in this country regarding its visibility. First, the moon's shadow is unusually narrow and therefore the light of the sky round the moon will be brighter than at most total eclipses, and will tend to swamp the coronal light. Secondly, the sun being very low on the horizon the atmospheric absorption will be very great and the coronal light, therefore, considerably diminished. Lastly, totality will only last 20 seconds, and your eyes will not have time to become dark-adapted. Therefore, if you wish to ensure getting the best view of the corona that the weather will permit, you will keep your eyes in the dark for at least five minutes beforehand. And if you wish to do this and at the same time watch the final phases before totality of the partial eclipse—to see, in fact, the narrowing crescent of the sun break up ultimately into the so-called Baily's Beads—you will wear such a mask as Messrs. Hamblin of Wigmore Street are making for the purpose. This is an opaque mask which allows no light to enter above or below or at the sides of the eyes, but only light coming through the deeply tinted screen that covers the eyeholes in the mask. Directly the last "Bead" of sunlight is seen to vanish throw off the screen—and the mask too if you like—and you will, with practically dark-adapted eyes, get the best possible view of the corona. Lastly, the screen used in front of the mask must be the *densest* that still permits the sun to be seen.

This sounds all very jolly and pretty, but is there any *use* in it all? Probably *not*, if one's criterion of use is an ability to make water the mouths, smart the eyes and tingle the ears of the capitalists. Yet, in some senses, there *are* uses in it. First, eclipses enable one to learn many things about these strange appendages of the sun: the laws which govern their changes in structure, form and brightness; the various pressures and temperatures existing at different layers and at the sun's surface; and the varying effects of different physical conditions on the various chemical elements in the layers. Such things are of great *astronomical* value, but they also lead to a wider sort of value. For, from the spectroscopic observation of the sun—and especially of the totally eclipsed sun—we can learn a great deal, which we otherwise could not, of the internal structure and mechanism of the atom. On the sun—and also in the stars—we have at our disposal far higher pressures and temperatures than we can produce in the laboratory, and by the spectroscopic study of these bodies we are discovering the laws that govern the way in which the atoms break up and lose more and more of their component electrons at increasing temperatures. In fact, more and more as years go by do physicists and mathematicians rely on astronomical and eclipse observations for extending and elaborating their laboratory investigations of the atom.

But such laboratory investigations are, you might say, as useless as astronomy itself. The truth of the matter is that the purer sciences—and the criterion for "purity" in this sense is the degree of abstraction in which a science works—are always many years ahead of the applied sciences; so that the "usefulness" of their discoveries only issues after years or even centuries have elapsed. For example, only now are the researches of Clerk Maxwell bearing fruit in wireless telegraphy, telephony and photography; or the discovery of helium in the sun by Janssen, which enabled Rayleigh to discover and isolate it in the laboratory, only recently gave rise to a large commercial project.

Again, in 1919 an eclipse at one swoop made possible the verification of the prediction which constituted the crucial test of Einstein's theory. And, just as years after their inception Newton's laws of motion and of gravitation became of universal importance in applied science, so it is possible in years to come that Einstein's modification of them will also find some application in the sciences of commerce. And so also may it be with our present day eclipse investigations on the structure of the atom, when the time comes that the energy now derived from the combustion of fuel is obtained from the disruption of the atom.

In conclusion, I shall refer briefly to a few of the " side-shows " of the total eclipse which those who go north may hope to see. During totality the sky overhead becomes comparatively dark, but the horizon, and the hills or clouds thereon, will take on remarkable rose-coloured and orange tints. The sky above and the clouds within it will appear to descend rapidly just before totality and seem to hang much lower than they did before ; similarly, any valley beneath one will appear to sink to an abnormal depth. I do not know much about the habits of birds and beasts at that early hour of the morning, but at eclipses occurring at more reasonable times birds, animals and even flowers show signs of abnormal behaviour.

Lastly, you ought to look for the moon's shadow as it fairly rushes across the sky. If the sky is completely overcast and the eclipse itself reduced to a complete *lotio ex*, you will get an even better view of the moon's shadow—as it travels across the country at nearly 100 miles a minute. If you are near the central line of the total zone you will see it just before totality like a thundercloud on the south or south-east horizon. Rapidly it spreads sideways along the horizon and, at the same time, up the sky; and with ever-increasing rapidity rushes over your head to envelop you. Immediately after totality you will see it departing in the north or north-west.

But, if it is fine, do not look for its *approach*—you will have to remove your screen and spoil your eyes for the corona. Instead, merely watch its *departure*. Again, do not look for it on the ground : you will, almost certainly, only see it in the *sky*. It is, I believe, an extremely impressive sight—some say the best " turn " in the whole eclipse. For it is the only occasion on which the stupendous velocities of the heavenly bodies are quite literally brought down to earth !

R. L. W.

Guy's Hospital Nurse's League.

LARGE was the gathering of the Past and Present Nurses at their Annual Meeting on May 27th.

Before dinner began Miss MacManus sent a telegram to Miss Hogg from the meeting. Later, one was read out from Miss Hogg wishing the League every success.

After a very good dinner, for which special thanks should be given to Miss West, Home Sister, every one adjourned to the large sitting room. Two former Matrons were present, Dame Sarah Swift, who took the chair for the meeting, and Miss Haughton.

Dame Sarah, in her opening speech, introduced Miss MacManus to those who had not met her. The report of the Matron, hon. secretary to the League, then followed, and is given below in full.

Dame Sarah presented the medals and prizes, and Miss Haughton then proposed the vote of thanks to the chair. She mentioned that it was 50 years since Dame Sarah had first begun to care for the sick. She began in Dundee, later went to Liverpool, then to the Seamen's Hospital and to Constantinople before coming to Guy's. Like Johnnie Walker, she was still " going strong." Coffee was served after the meeting, and the exhibition of needlework and photographs was inspected. This was not as large as usual, and members are asked to try and send in more next year.

Report of the Year's Work

Between 80 and 90 members have been transferred to the Past Section of the League during the year.

The Cottage has again been much appreciated, 170 Nurses have spent week-ends there, and over 1,300 short visits have been made ; 10 Past Members have also visited the Cottage for short periods during the year.

In all, 1,274 volumes have been taken out of the Nurses' Library during the year.

The Nurses' Tennis Club again took part in the Tennis Tournament arranged by the *Nursing Times*, and our team worked its way into the final, their opponents being St. Thomas's Hospital Nurses. The match was played at the Marylebone Hospital, and, after a most strenuous game, the St. Thomas's team were declared the winners, and they once again bore off the coveted cup. The four finalists received as consolation prizes beautiful books on *London*, presented by the *Nursing Times*.

The Fagge Cup Competition attracted 31 entires, and took all the summer to play off. The final was played off in November, and, after an excellent game, Sister Cornwall was declared the winner. Other enjoyable events during the season were matches against the Administrative Staff, Miss James's team from Sidcup, and the wives of the Medical Staff. We are greatly indebted to the Hon. Mrs. Molyneux for defraying the cost of an umpire's step ladder and a new tennis net. Mr. Whitbread, the Treasurer, is also defraying the cost of draining the new tennis court.

The Swimming Club has had a most successful season. The Nurses' Annual Gala was held in the Nurses' Home in July. Lady Fripp's Cup was keenly competed for, and won by Nurse Smyth.

Miss Daly, of the Bath Club, again judged the events, and the prizes were presented by Lady Fripp.

The Inter-Hospital Sports were held at the Bath Club in June, and the Guy's team for the first time in six years lost the cup presented by Sir Alfred and Lady Fripp for speed to St. Bartholomew's Hospital.

On June 24th, 1926, the Guy's team competed for the Holmes Vase at the Prince of Wales' Hospital, and this year we were fortunate enough to regain the Vase.

The Inter-Hospital Swimming Club held its Annual Gala at the Automobile Club in September. There were some very close events, and Nurse V. Barnes was successful in winning the Countess of Donoughmore's Cup. Our team was also successful in winning several other events, but we lost by one mark the *Nursing Mirror Shield*, which was offered for the first time for the team gaining the highest number of marks in all events.

A Silver Challenge Cup, to be known as "The Matron's Cup," was presented by Miss Hogg in November. The Cup is to be competed for annually by members of the Nursing Staff, the Massage School, the Electrical School and the Administrative Staff. This year three teams entered—the Nursing Staff, the Massage School and the Electrical School. The race, which was a "relay," was won by the Nursing Staff.

The Nurses' Choral and Dramatic Society, in conjunction with the Guy's Hospital Musical Society, have had a very successful season. They were, owing to the coal strike, unable to give a concert in May, but in October four performances of Gilbert and Sullivan's comic opera, *The Gondoliers*, were given at the Guildhall School of Music before crowded audiences.

The Nurses' Debating Society have not been able to give any debates this year.

Further contributions received during the year brought the Nurses' League Bicentenary Appeal up to a total of £2,422 3*s*. You will, no doubt, be interested to hear that we have had the two Private Rooms occupied by sick members of the League, for the greater part of the year.

In February last the President, Lady Bonsor, sent out a letter to members of the League inviting them to subscribe to a Testimonial Fund to Miss Hogg. Nearly 1,000 Past and Present Members responded to the appeal, and Lady Bonsor, on April 7th, saw Miss Hogg in the Matron's House and handed her, in the name of the Past and Present Members of the League, a cheque for 200 guineas and a list of the names of the subscribers. A book, with an illuminated address and names of subscribers, is being prepared.

The Exhibitions of Needlework and Photography in the Sitting Rooms have not been so well supported this year, the exhibits not being nearly so numerous as usual.

Mrs. Burgwin again very kindly came and judged the needlework, and was very pleased with the quality of the work sent in, but was disappointed to find that the classes for plain needlework and patching were so small. In the Miscellaneous Class, a beautifully made Persian rug, sent in by Sister Angove, and some leather work by Mrs. Buckler and Miss M. B. Haynes, were highly praised.

There were some excellent photographs sent in for the Photographic Exhibition, but the classes for photographs the entire work of the competitor, and paintings, sketches and drawings were very disappointing, so few exhibits being sent in. We hope that when members are making their holiday snapshots they will put some on one side to send to the Exhibition next year.

I much regret to record that we have been notified of the death of six Past Members of the Nurses' League since our last meeting.

Miss Ada Farrar, who died in Salisbury Hospital, Rhodesia, on January 30th, 1926. Miss Farrar entered Guy's as a Probationer in 1902, and on completion of her training held various nursing appointments in England. In 1912 she went out to Aden as Sister-in-Charge of the Mission Hospital for two years. During the war she served with the Russian and Italian armies, and after peace was signed she was appointed Matron of the Morden Hall Hospital for Disabled Soldiers, which post she gave up to go out to her brother in Rhodesia.

Miss Mabel Vivian, who died at Plymouth on May 26th, 1926, following an operation. Since completing her training in March, 1903, Miss Vivian held various nursing appointments, and at the time of her death was Sister-in-Charge of St. Peter's Rest.

Mrs. Gwladys M. Scott, née Isaac, who died after a short illness on December 3rd, 1926. Mrs. Scott entered Guy's as a Probationer in 1921 and left on completion of her training in 1924.

Mrs. Nellie Hird, née Stanton, who died very suddenly at Heswall on December 17th, 1926, from cerebral hæmorrhage. Mrs. Hird entered Guy's in 1901, and on completion of her training took up private nursing until her marriage.

Mrs. Katherine D. M. Mitchell, née Tilleard, who died at Guildford after a long and painful illness on January 6th, 1927. Mrs. Mitchell entered Guy's as a Probationer in January, 1909, and on completion of her training took up private nursing until her marriage.

Miss Elizabeth A. Dickinson, who died at Ely on March 12th, 1927. Miss Dickinson entered Guy's in 1902, and on completion of her training took up District Work for some years. During the war she worked under the British Red Cross in England, and from 1919 to 1922 held appointments at the Mayo Hospital, Lahore, and the Civil and Railway Hospital at Quetta, India.

Miss Lettice M. Wright, who died in March, 1927, from typhoid fever, contracted while acting as Temporary Sister at the Radcliffe Infirmary, Oxford. Miss Wright entered Guy's in December, 1914, and soon after completing her training in April, 1918, was appointed Sister at the Radcliffe Infirmary, Oxford, which post she held until 1922, when she left to take up visiting nursing in Bournemouth.

I have much pleasure in presenting the financial statement for the year, and I am pleased to say that we are in the happy position of having a very satisfactory balance to carry forward. The hon. Members subscriptions amount to £50 8*s*. 6*d*., the Past Members subscriptions and composition fees to £134 18*s*., and the Present Members subscriptions to £120 15*s*. The subscriptions and grants have again more than covered the working expenses of the Cottage and different clubs, and we have also paid a sum of £29 3*s*. 4*d*., part cost of railway tickets to Honor Oak Park. Our income for the year amounts to £729 18*s*. 2*d*., and our expenditure to £375 8*s*. 8*d*. We have also this year been able to buy another £150 worth of 5 per cent. War Loan Stock, so that our investment in War Loan Stock amounts to £650, and we are carrying forward a balance at the bank of £302 8*s*. 7*d*.

Once again this large balance is chiefly due to our kind friend Sir Cosmo Bonsor, who has given us two most generous donations during the year amounting to £120. This balance will, however, be required to help defray the cost of printing the revised *Register of Members of the Nurses' League*, the publication of which has been unavoidably delayed. The proofs are now in the printers' hands, and we hope to send it out to all members in the course of the next few weeks.

The result of the ballot for the election of Members of Council for the ensuing year has been posted in the Hall of the Nurses' Home. The retiring Hon. Members of Council this year are Mrs. Fagge, Mrs. Steward and Mrs. Trethowan, and Mrs. Fawcett, Mrs. Ogilvie and Mrs. Redding have kindly consented to serve as Hon. Members of Council for the next three years.

MEDALS AND PRIZES FOR THE YEAR 1926

The Butterworth Medal

The Butterworth Medal, instituted by Joshua W. Butterworth in 1889, is awarded to all Nurses of Guy's Hospital who shall have completed 5 years continuous satisfactory service at the said Hospital.

Sister Phyllis Burvill Holmes.
Sister Vera K. Pitman.
Sister Marjory A. Lloyd.
Sister Edith A. Perkins.
Sister Muriel R. Pratt.
Sister Ada Matthews.

The Cazenove Medal

The Cazenove Gold Medal, awarded to the Nurse who shall have obtained the highest aggregate percentage of marks in all the Examinations held during 1925 and 1926.

Nurse Dorothy I. Henderson.

The Keogh Prize

The Keogh Prize, consisting of Surgical Instruments, awarded to the Nurse obtaining the highest number of marks in the Surgical Examination.

Nurse Kathleen Hughes.

The Morrison Prizes

The Morrison Prize, Medical Books, awarded to thd Nurse obtaining the highest number of marks in the Examinations in Medicine and Nursing Subjects.

Nurse Dorothy I. Henderson (Examination in Nursing).
Nurse Elizabeth A. Donaghy (Examination in Medicine).

Bernard Loftus Brown Prizes

The Bernard Loftus Brown Prizes, presented by Mr. and Mrs. A. Loftus Brown in memory of their son, are awarded to the Nurses gaining the highest number of marks in each of the Final Practical Nursing Examinations held during the year.

May—Nurse Edna M. Barnes.
October—Nurse Dorothy I. Henderson.

The Governors' Prizes

The Governors' Prizes, Medical Books, awarded to Probationers obtaining the highest number of marks in the two Junior Examinations held during the year.

August, 1926—Nurse Audrey Bristow.
February, 1927—Nurse Angela Falwasser.

NEEDLEWORK EXHIBITION

LIST OF AWARDS

SECTION I—Unwashed Exhibits

Class A—Plain Needlework

1. *Underclothing*—
   First Prize - - Miss M. Morelly.
   Second Prize - - Miss A. West.
   Highly Commended - Miss M. Morelly.

3. *Patching and Darning*—
   Highly Commended - Miss R. Dreyer.

Class B—Fancy Work

1. *White Embroidery*—
   First Prize - - Miss Pearse.
   Second Prize - - Miss Boys.
   Highly Commended - Miss A. West.
2. *Hardanger Work*—
   Prize - - - Miss Corder.
   Highly Commended - Miss Hill.
4. *Cut Work and Other Embroidery*—
   Prize - - - Miss Harries Jones.
   Highly Commended - Miss Boys.

Class C

3. *Knitting*—
   Prize - - - Mrs. F. K. Davis.

Class D

Dressmaking—
   First Prize - - Miss Condon.
   Second Prize - - Miss B. M. Noble.
   Third Prize - - Miss E. Bullock.

Class E

Miscellaneous Handicrafts—

Leather Work—
   First Prize - - Miss Haynes.
   Second Prize - - Mrs. Burrell.

Bags—
   Prize - - - Mrs. Blaze.

Rugs—
   Prize - - - Miss Angove.

Sealing Wax Beads—
   Highly Commended - Miss B. M. Noble.

Basket Work—
   Highly Commended - Miss Probert.

SECTION II—Washed Exhibits

Class A

Plain Needlework—
   First Prize - - Miss Bullock.
   Second Prize - - Miss Dreyer.

Class B

White Embroidery—
   First Prize - - Miss Wilson.
   Second Prize - - Miss Bullock.
   Highly Commended - Miss Hill.
   Highly Commended - Miss Stevens.

Class C

Crochet—
   Highly Commended - Miss Dixon.

EXHIBITION OF PHOTOGRAPHS, 1927

LIST OF AWARDS

Class A

Prize—Miss A. Merson, "The More We Are Together."

Class B

1st Prize - Miss G. H. Fletcher, "Street in Enearone."
2nd Prize - Miss M. E. Faull, "Fishing Smack, Lowestoft Harbour."
3rd Prize - Mrs. F. K. Davis, "Tea for Two."
4th Prize - Miss Douglas Crompton, "Cornelius Ward."
Highly Commended—Miss A. Merson, "Outward Bound."

Class C—Paintings and Drawings

1st Prize - Miss M. George, "A Bowl of Roses."
2nd Prize - Miss H. G. Watkins, "A Water Colour."

GUY'S HOSPITAL PAST AND PRESENT NURSES' LEAGUE, 1927

Result of Ballot for Members of Council for the Ensuing Year

Three Hon. Members of Council—
   Mrs. Fawcett.
   Mrs. Ogilvie.
   Mrs. Redding.

Choral and Dramatic Society—
   Sister Evelyn (Miss Gibbs).
   Nurse E. Baker.

Swimming—
   Sister Bermondsey (Miss Burton).
   Nurse V. Barnes.

Garden—
   Sister Dora (Miss Smith).
   Nurse O. Roberts.

Tennis—
   Sister Bright Annexe (Miss Johnson), re-elected.
   Nurse V. Johnson.

Hockey—
   Sister Theatres (Miss Cripps).
   Nurse D. M. Reed.

Library—
   Sister Agnes (Miss West), re-elected.
   Nurse Alchin, re-elected.

Photography—
   Sister Astley Cooper (Miss Bishop), re-elected.
   Nurse Douglas Crompton.

Debating—
   Sister Florence (Miss Taylor).
   Nurse L. Young.

Needlework—
   Sister O. P. Annexe (Miss Dreyer).
   Nurse D. Mitchell.

Correspondence.

Bryden Glendining.

DEAR SIR,—Though considerably his junior at Guy's, I had been privileged to see a good deal of the late Bryden Glendining during the two years that intervened between his retirement and his death on May 19th, and I should like to add my tribute to that of Mr. Ormond.

During this period, though confined to his house, he ignored his illness with complete courage and cheerfulness, and retained all his interest in his work, his friends and his old Hospital. With him one felt in the presence of an alert mind and an exceptional personality. He kept in touch with current events and with recent work in every branch of surgery. His opinion, which I have gratefully sought on many occasions, showed that cautious judgment and sound critical outlook which characterised his writings.

Glendining came to Guy's from New Zealand in 1898, and qualified in 1903. He held the usual House appointments, and, like his younger brother, Vincent Glendining, now at Walford, was House Surgeon to Sir Arbuthnot Lane, and played Rugby for Guy's.

On leaving the Hospital he became Resident Surgeon at the Hertford Hospital in Paris, and left this post to become personal physician to H.M. the Queen of Spain. On returning to England he took the F.R.C.S.England in 1908 and the M.S. Dublin in 1909. He became first Pathologist and, later, Assistant Surgeon to the Chelsea Hospital for Women, and in 1912 was appointed Gynæcological Surgeon to the Hampstead General Hospital. During this period he carried out pathological research in conjunction with gynæcological practice, and for three years held an Emden Research Scholarship at the Cancer Laboratories of the Middlesex Hospital. He published a number of important papers on cancer of the female genital tract.

In 1913, at a time when a brilliant career was opening before him, he first showed signs of the lung trouble from which he finally died this year. After six months' rest he returned to his London work, and, at the beginning of the war, took up in addition the post of Surgeon to the Duchess of Bedford's War Hospital at Woburn Abbey. A further breakdown in 1916 forced him to resign his hospital appointments in London and live in Woburn, where he continued to work till, in 1925, failing health forced him to retire. He carried on the work of 200 beds at the War Hospital till its closure in 1920, and after that took charge of Woburn Cottage Hospital. Though trained as a gynæcologist, he became a general surgeon of quite exceptional excellence, and by his knowledge, clinical instincts and operative skill established the Hospital as a consulting centre for the neighbouring poor of Bedfordshire and Buckinghamshire.

He leaves a widow and one son.

W. H. OGILVIE.

Lister Centenary.

DEAR SIR,—I was much interested in reading in your number of April 23rd some reminiscences of Guy's in connection with the Lister Centenary.

May I be pardoned for adding a few more, inasmuch as my memory goes back over half a century.

I qualified in January, 1878, and was a contemporary of Sir Wm. Hale-White and Sir Arbuthnot Lane. I served as Ward Clerk to Mr. H. G. Howse and consequently was one of the pumpers of the hand spray, of which work I still have a vivid recollection, particularly of the fact of the agony I used to endure from my hands being in a continual mass of chaps, due to the carbolic irritant. But the post was a coveted one, because it gave the ward clerk a very close view of the operations, so close indeed that occasionally, when we became too much interested, we forgot to continue pumping. Mr. Howse, as he was then, was an extraordinarily good surgeon, and he was the only man in my day who carried out Listerism, although a couple of the Assistant Surgeons, without acknowledging themselves to be Listerites, quietly adopted a feature or two of Listerism. Mr. Bryant was strongly opposed to it, and it is difficult for people to-day to realise how bitter the feud was between the Listerites and the anti-Listerites. It went so far that two of the staff actually ceased to be on speaking terms with each other.

Mr. Jacobson was the Junior Demonstrator of Anatomy when I was in the dissecting room, Mr. Clement Lucas and Mr. Golding Bird being his seniors. The latter is the only surviving member of the staff of my day, which is something to be very thankful for, because he was even then handicapped by delicate health. He was one of the most lovable young men I ever met.

Sir Thomas Bryant, as one of your correspondents mentions, was an extraordinarily good lecturer, especially at the bedside. He had a

remarkable talent for putting students up to the practical points of surgery, and his courtly and genial manners put everybody at ease.

Mr. Jacobson was an excellent and painstaking teacher, and took a great interest in those under him, but he did not suffer fools gladly, and used to be a bit sarcastic when he came across one.

I remember dear old Mr. Cock well. In my day he used to be almost as regular as clockwork in his attendance in the operating theatre, and I well remember that he always wore a velveteen lounge jacket, a remarkable costume in that day.

It is very curious that Sir Wm. Hale-White learnt his anatomy at the same time as myself, under Jacobson, and yet he was, I believe, full physician years before Jacobson was full surgeon. Mr. Birkett and Mr. Cooper Forster were the senior surgeons when I entered. I was Assistant Surgeon's Dresser to Mr. Golding Bird and Full Dresser to Mr. Durham, and I remember well my disappointment, with all due respect to Mr. Durham, who was the most kindly man and a surgeon of extraordinarily manual dexterity, when I did not get appointed to Mr. Howse, for, boy as I was, I was immensely impressed with Listerian teaching. As one of your correspondents mentions, the full dressers in those days were practically house surgeons, and a lot of responsibility devolved on them. As a rule, most of them were qualified before they received the appointment. When I got the post only a man named Stuart and myself were unqualified. I vividly remember just after I did qualify, Mr. Durham, without giving me the slightest warning of his intention, suddenly putting a scalpel in my hand and calling upon me to excise a breast for malignant disease. It was not a Sampson Handley, so I managed to get through it without mishap, but it was a pretty trying experience to do even the simplest operation in those days before a whole theatreful of spectators.

Before closing this letter, which is already too long, it may be of interest to mention that both editors of the *Journal of the Medical Association of South Africa*, Dr. C. L. Leipoldt and myself, are Guy's men; also that the Presidents of the Cape and Transvaal Medical Councils, myself and Dr. W. T. F. Davies, hail from Guy's. There is one other Guy's man in South Africa who is my contemporary, Dr. G. B. W. Messum, who is still in practice at Pretoria.

Yours faithfully,

W. DARLEY-HARTLEY.

Southern Life Building,
St. George's Street,
Cape Town.
May 20th, 1927.

The R.A.M.C. as a Career.

DEAR SIR,—We desire to bring to the notice of your readers the opportunities for a career which are afforded by service in the Royal Army Medical Corps.

The British Medical Association has given prolonged consideration to the causes which, since the war, have led to the unpopularity of the Corps, and with a view to improving the situation placed suggestions before the Inter-Departmental Committee that was set up by the Government in 1926 to consider the question of the shortage of candidates. Practically the whole of the Association's suggestions were adopted by the Government, and have now been incorporated in the Royal Warrant of July, 1926. The Representative Body of the British Medical Association at its Annual Meeting last year expressed its satisfaction with the new rates of pay and conditions of service provided for in the Warrant.

The rate of pay for an officer in the Corps compares favourably with the remuneration obtainable in other walks of professional life, and to those who do not desire to remain permanently in the Corps gratuities rising from £1,000 after 7 years' service to £3,500 after 6 years' service in the rank of major are payable. There are also suitable rates of retired pay after 18 years' service. Further, the following valuable concession has now been made:—

"An entrant who is holding or is about to hold at the time of the Entrance Examination a Resident House appointment at an approved civil hospital, may be seconded while holding such appointment, up to a maximum period of 12 months. A candidate who has held such an appointment within 6 months of entry, may be granted an antedate up to 12 months in respect of the period for which the appointment was held. This secondment and antedate count in all respects as commissioned service, except that pay will not be issued for that period."

This provision of the Warrant has the effect of enabling a candidate who has held a resident hospital appointment before entering the Corps, a better chance of reaching high rank before he has to retire on account of age.

There is an impression that facilities for good professional work are not available in the military medical service. But this is far from the truth. Research work in preventive medicine and in other directions is encouraged, and laboratories are provided in all large garrisons and tropical stations, while in no other service has provision been made for so extensive and prolonged a post-graduate course in all branches of medical practice, hygiene

and pathology as that which all officers of the Royal Army Medical Corps must go through after their first tour of service abroad.

The future of the Corps is obviously dependent upon an adequate supply of young doctors, and the British Medical Association has no hesitation in view of the above facts in recommending the claims of the Corps to those who are looking out for a start in life.

Yours faithfully,
RICHARD H. LUCE,
Chairman, Naval & Military Committee.
A. P. BLENKINSOP,
Major-General.
W. G. MACPHERSON,
Major-General.

British Medical Association House,
Tavistock Square, London, W.C.1.
June 20th, 1927.

Modernising the Colonnade.

DEAR SIR,—I trust you will pour your Editorial scorn on the ultra-modernisation of the Colonnade. I refer to the stamp machine which has been placed there in as prominent a position as possible and, together with its hideous advertisements, is now an eyesore for all who have to wait in the Colonnade for their physician or surgeon.

I presume we may regard this machine as the thin end of the wedge and that we shall have rows of automatic machines of all types in an endeavour to make the Colonnade look like Southend Pier and perhaps, at the same time, we shall have advertisement hoardings in the Park.

Perhaps the machine installed is a tribute to the taste of those who are always seen smoking cigarettes and are now asking for an automatic cigarette machine in the Colonnade.

Yours truly,
DRESSER.

Guy's Hospital, S.E.1.
June 11th, 1927.

G.H.L.A. Garden Fete.

DEAR SIR,—I should be grateful if you would publish the enclosed letter, which I have received from Lady Bonsor.

Yours truly,
C. W. MARSHALL,
President of the Residents.

Dear Sir,—I am writing on behalf of the Committee of the Guy's Hospital Ladies' Association to ask you to be so kind as to convey to all the officers and students who so kindly assisted us at our Fete last Thursday our gratitude and sincere thanks and grateful appreciation that our financial success was largely due to their good offices.

Yours very truly,
MABEL BONSOR,
Chairman.

Red House,
Tadworth, Surrey.
June 11th, 1927.

Sport.

Cricket.

Guy's v. Repton Pilgrims.

THIS match, which was played at Honor Oak Park on Saturday, May 28th, ended in a draw in the Hospital's favour.

Scores—Guy's 217 for 5 wickets, Repton Pilgrims 234 (Valentine 70).

Guy's

T. Garland, b. Wilson	42
A. G. Ensor, l.b.w. b. Barwell	13
H. Spence, st. Franklin, b. Wilson	0
A. H. Curtis, b. Barwell	56
J. Durr, c. Cardew, b. Barwell	44
G. J. Clarke, not out	50
J. G. Van Schalkwijk, not out	1
Extras	11
Total (for 5 wkts.)	217

Eustace, Preen, Hutchinson and Evans did not bat.

Bowling—Durr 3 for 75, Curtis 3 for 49, Van Schalkwijk 1 for 95.

Guy's v. Old Charlton.

GUY'S lost the toss and our opponents went in. Bishop was bowled with the first ball of the match by Durr, who secured another wicket in his second over, while Curtis had Shrimpton l.b.w. soon after. The score was then carried from 19 to 64, when Durr bowled first Lee and then Head, who batted well for 51. Curtis dismissed Fort and the next three wickets fell to Durr, Garland smartly stumping two men, while Martin, who made 22, was caught by Eustace in the deep. The last wicket fell to Curtis with the total at 103.

Both Durr and Curtis bowled well, the former being especially good, breaking both ways, but getting most of his wickets with straight balls of good length. The fielding was on the whole good.

Garland and Ensor opened our innings, the former hitting out with confidence, while Ensor played a more steady game. This partnership, which produced 86, lasted until Garland, who hit one 6 and six 4's in his innings of 44, was bowled when trying to pull a straight one from Shrimpton. Spence appeared ill at ease with Shrimpton's slows,

and was soon out l.b.w. Curtis, however, started confidently and the score was carried to 99 before Ensor, who played a good innings of 37, was bowled by Shrimpton. Clarke went in and he and Curtis carried the score past that of our opponents on to 166, when Curtis, who was twice missed towards the end of his excellent 55, was caught. Clarke hit up 22, but few more runs were added.

Scores—Old Charlton 103: Guy's 201 for 8 wickets.

Guy's.

Garland, b. Shrimpton	44
Ensor, b. Shrimpton	37
Spence, l.b.w. b. Shrimpton	0
Curtis, c. Lee, b. Martin	55
Clarke, c. Fort, b. Martin	22
Eustace, b. Martin	4
Hutchinson, c. Shrimpton, b. Martin	11
Barwell, not out	3
Trick, st. Goodway, b. Shrimpton	7
Extras	18
Total (for 8 wkts.)	201

Durr and Lewin did not bat.

Golf.

THE Monthly Competition was held on Wednesday, May 4th, at West Kent, Chislehurst, and was a Medal Round.

The following returns were made:—

J. A. Vernon	91—12=79
S. H. Croot	96—16=80
J. B. Schofield	102—18=84
H. B. Thornton	101—15=86
E. C. Duffett	103—13=90

The draw for play in the "Staff Cup" will be posted shortly. Competitors are requested to take special note that three weeks will be allowed for each round, and that in the event of any match or matches not being played, both or all competitors will be definitely scratched.

The following matches have been arranged, and it is hoped that it will be possible to arrange returns at West Kent later in the season.

Shortlands	Wed.	June 22	Shortlands
Hastings	Sun.	July 10	Hastings
Sidcup	Wed.	,, 20	Sidcup
Staff Match	Wed.	,, 27	Sidcup

E. C. DUFFETT, *Hon. Sec.*

Hospital Information, etc.

Pass List.

F.R.C.S. Edin.

H. A. H. Harris

University of London.

Third (M.B., B.S.) Examination for Medical Degrees.

May, 1927

HONOURS

*E. C. Warner, B.Sc. †J. M. Turner

* Distinguished in Pathology

† Distinguished in Surgery

Pass.

S. G. Bown
A. S. Gough
C. W. Marshall
E. Wornum
John Evans
W. Leslie
H. K. Williams

GROUP I

E. S. Phillips
R. M. Williams
J. R. C. Spicer
H. D. Wyse

GROUP II

C. G. Bowen
W. R. C. Spicer
C. L. Worthington
F. W. Bradley
J. G. Weston

University of Cambridge.

Bachelor of Medicine and Surgery.

R. E. Smith

Royal College of Surgeons.

F.R.C.S.

Final Examination.

W. A. Mill
W. H. A. Dodd
R. L. Dodds
G. H. Pitt
H. G. Armstrong
D. McKelvey

Papers by Guy's Men.

C. P. Symonds, M.D. (1) Bilateral Ulnar Neuritis in Association with Skeletal Deformities: Hypertelorism; (2) Case of Syringomyelia with Hydrocephalus and Cancer Tremor (Fibrillation) of the Right Hand, *Proc. Roy. Soc. Med.*, 1,241; *Sec. Neurology*, 45.

——I A Case of Schilder's Encephalitis with a Family History of the Disease; (2–3) Cervical Rib: Thrombosis of Subclavian Artery, Contralateral Hemiplegia of Sudden Onset, probably Embolic, *Ibid.*, 1,242, 1,244; *Ibid.*, 46, 48.

C. P. Symonds, M.D. Case for Diagnosis, *Ibid.*, 1,246; *Ibid.*, 50.

W. H. Craib. A Study of the Electrical Field Surrounding Active Heart Muscle, *Heart*, xiv, 71, 1927.

J. M. H. Campbell. The Geographical Distribution of Goitre in School Children (England and Wales), *Journal of Hygiene*, xxvi, i, 1927.

V. F. Soothill, M.D., and another. Paratyphoid "B" Fever Conveyed by Ice Cream, *Lancet*, 1927, i, 1,233.

W. H. Ogilvie, M.Ch., F.R.C.S. The Treatment of Femoral Hernia. *Ibid.*, 1,252.

Change of Address.

H. A. H. Harris, "Thornwoods," New London Road, Chelmsford.

A. V. Clemmey, 27, Merton Road, Bootle, Lancs.

Marriage.

BAILEY—ENNIS—On Saturday, April 23rd, at King Charles-the-Martyr Church, Tunbridge Wells, Nancy, second daughter of Mr. and Mrs. Guy B. Ennis, of "Scotsfar," Heathfield, Sussex, to Edwin Randolph, eldest son of Mr. and Mrs. J. W. Bailey, Wandsworth Common, S.W.

EDS. { P.F.S.C. G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *July 2nd, 1927.* *Number 1016*

PASSIM

WE join cordially in the general welcome home to the Duke and Duchess of York after their very successful tour to distant parts of the Empire.

At Guy's, where there is perhaps a larger percentage of Colonials than at any hospital in the land except Edinburgh, the value of a visit of members of the Royal Family to the Dominions, especially if they possess the personal charm of the Duke and Duchess, is well realised, being one of the factors that make Colonials who for two generations have not visited these islands refer always to England as Home.

WE draw attention to a letter published elsewhere from the Chancellor and Vice-Chancellor of the University of London, the Lord Mayor and the Chairman of the University of London Athletic Appeal Committee.

The University of London is unique in the world of education, offering, as it does, facilities to obtain its degrees to all, and to students in every part of the Empire and maintaining a standard which is doubtless the highest in the Empire. At the same time it offers no true University life. There must be extremely few members of its scattered Colleges and associated bodies who could name off-hand its components, and very few who could name even 20 per cent.

There are many factors which act against corporate University life; foremost among them are its dissemination throughout London, the large number of external students, the absence of any common place of meeting and athletic co-operation. Therefore, though a University in name, it virtually tends towards becoming an examining body setting extremely difficult examinations, and it is written that ye shall not live by examinations alone.

The authorities of the University are making very strenuous and laudable efforts in the difficult task of shaping something definite and co-operative from this mass of extremely potential material. The question of the relationship of the Hospital to the University, having been discussed in Passim recently, needs no further examination. It seems quite certain that the Hospitals, built on a strong foundation of traditions lasting very many years, will suffer little by the development of a corporate University.

The University has acquired an extensive site in Bloomsbury, where a centre for its administrative and social side is being developed. Its further urgent requirements are money to construct and endow a sports ground, for which 28 acres have been obtained at Motspur Park. For this some £60,000 is still necessary, an appeal for which must commend itself to all who consider that right education is the very substance of which a nation's spirit is made.

WE offer our congratulations to Mr. G. W. Rake, who was recently awarded the Treasurer's Gold Medal for Clinical Medicine and a Certificate for Surgery, and to Mr. L. G. T. Pitt Payne, who was awarded the Gold Medal for Surgery, also to Mr. W. F. Hudson, who was awarded the Certificate for Clinical Medicine.

WE offer our congratulations to Surgeon-Captain A. R. Brailey, M.B., F.R.C.S., of the London Division, Royal Naval Volunteer Reserve, on his appointment as an Honorary Surgeon to the King.

WE have been requested by the Guy's Hospital Ladies' Association to acknowledge gratefully the drawing by Miss Joyce Dennys entitled "The

Smiths Entertain a Famous Surgeon," which, by the courtesy of *The Sketch*, was presented by Miss Dennys for raffle at the Garden Fete.

WE have been asked to draw attention to the fact that applications are invited for the Arthur Durham Travelling Studentship of the value of £100. Particulars may be obtained from the Medical School.

Applications must be made to the Dean on or before July 11th.

THE following is the programme of the Bright Centenary Celebration, to be held on July 8th :—

11 a.m.—Professor Ludwig Aschoff, of the University of Freiburg, will give a Demonstration on " The Pathology of Bright's Disease," in the Anatomy Lecture Theatre. Dr. John Fawcett, M.D., F.R.C.P., will take the Chair. The Demonstration is primarily intended for Students and a resumé of Professor Aschoff's Lecture will be provided.

12 noon—Professor Lemierre, of the University of Paris, will give a Clinic on Selected Cases of Bright's Disease in the Physiology Theatre. Dr. A. F. Hurst, M.D., F.R.C.P., will take the Chair.

1.30 p.m.—The Rt. Hon. The Earl of Balfour, K.G., O.M., F.R.S., and a party of Distinguished Guests, will be entertained to luncheon in the Governors' Court Room.

3 p.m.—Dr. W. S. Thayer, M.D., Emeritus Professor of Medicine, Johns Hopkins University, Baltimore, U.S.A., will deliver the Bright Memorial Oration in the Physiology Lecture Theatre.

The Rt. Hon. the Earl of Balfour will preside. Subsequent to the Oration, Dr. Thayer, Professor Aschoff, Professor Lemierre (representing Professor Widal) and Sir John Rose Bradford will be presented to Lord Balfour to receive the Bright Memorial Medal. The Medal which the School had decided to award to the late Professor E. H. Starling prior to his death will subsequently be forwarded to Mrs. Starling.

The Treasurer of the Hospital will propose a vote of thanks to Lord Balfour.

Tea will subsequently be served in the Wills Library and in the Medical School Committee Room.

A collection of " Bright " relics will be on view in the Gordon Museum, and the Laboratories, etc., of the Medical School will be open for inspection.

NOTE—All guests are particularly requested to be in their places for the Oration by 2.45 p.m.

THE Guy's Hospital Reports Committee have decided to combine the July and October numbers of the *Reports* to form a special Bright Centenary Double Number, which, in addition to a large number of contributions dealing with Bright's Disease and allied subjects, will also include a verbatim account of the Centenary Celebrations.

Some Affections of the Ribs.

A Clinical Lecture by Mr. R. Davies-Colley, C.M.G., M.Ch.

GENTLEMEN,—I propose to consider to-day three affections of the ribs—cervical rib, slipping rib and myositic swellings about the costo-chondral junctions of the ribs. Of these the first is well known, but the other two have not received the attention which is due to them.

Cervical ribs produce symptoms more commonly in women than in men, though whether they are actually more common in the female sex is difficult to determine, because they so often give rise to no symptoms. In fact, probably the vast majority of cervical ribs are discovered only accidentally or not at all. Why there should be this preponderance of symptoms in women is not clear. The only explanation I can offer is that in men the shoulder muscles are more heavily developed, and so give better protection for the structures lying in the posterior triangle of the neck than in women. Some such explanation is probably the correct one because, assuming that, as is most likely the case, trauma from without is the cause of most of the effects of cervical rib men, being more liable than women to trauma, would otherwise be more commonly affected.

Cervical ribs are usually bilateral, though the symptoms are almost always limited to one side. Four types or degrees of development are recognised : (*a*) A short rib capped with cartilage, the free extremity of which projects horizontally outwards and forwards ; (*b*) the rib is continued forward and either articulates with a projection on, or is attached by bone, or fibrous tissue to the first rib about the position of the scalene tubercle ; (*c*) the rib is complete and articulates with the sternum ; and (*d*) the rib is short, but its extremity is continued forwards by a fibrous band which is attached to the sternum or the anterior part of the first rib.

Symptoms rarely appear in early life, the usual age being between 35 and 50. Possibly this is due to the fact that at this period of life women are apt to lose the protective covering of fat which has been present in the posterior triangle throughout their youth. It has certainly been my experience that the sufferers are generally thin subjects.

The symptoms fall under three headings: (1) Those due to the presence of a lump in the neck; (2) nerve symptoms; and (3) vascular symptoms.

The rib which forms a palpable, and sometimes a visible, lump in the neck is one of the first two types, and it must be remembered here that the size of the projection bears no relation to the degree of the symptoms produced. A short prominent rib does not extend far enough forwards to lift the brachial nerves from their normal relationship with the first rib, and is often discovered accidentally by the patient herself during the act of washing, or, as was the case in a girl I saw last week, as the result of a bruise, which left a painful prominence behind it. The end of the rib is felt behind the posterior border of the sterno-mastoid muscle, about two inches above the clavicle.

Pressure effects on the nerves and vessels are more apt to occur when the rib is complete or when its extremity is continued forwards by a fibrous cord. In these cases the vessels and nerves which normally pass out from the thorax over the first rib are raised by the cervical rib to a higher level in the neck, where they become liable to injury and at the same time are sharply kinked as they pass over the bony or fibrous arch.

The nerve symptoms are those of a brachial neuritis which in the typical cases is limited to the eighth cervical and first dorsal nerves, and has therefore an ulnar distribution in the arm and hand. They vary, with the degree of neuritis present, from a sensation of numbness or "pins and needles" in the fingers and neuralgic pains in the arm to cutaneous anæsthesia and muscular weakness and wasting and, finally, paralysis. Though the lowest trunk of the plexus is the one usually affected, the upper trunks may be involved as well, and occasionally the upper trunks are affected. The result is that a very variable picture of neuritis may be produced. It is important to emphasise this point in order to make it clear that in any case of bronchial neuritis of unexplained origin the possibility of cervical rib must be carefully investigated.

The vascular symptoms are not so frequent. When they occur they are arterial and not venous. The subclavian vein lying in front of the artery is under cover of the sterno-mastoid muscle, by which it is protected from external pressure, and, having thin walls, is less affected by kinking, so that œdema of the arm from venous obstruction is of very rare occurrence. Arterial symptoms are seen in two forms—abnormal pulsation in the neck owing to the upward displacement of the subclavian, and those arising from obstruction to the flow in the vessel. The unusual prominence of the subclavian in the neck may give rise to the suspicion of aneurysm, and occasionally an aneurysm has actually developed as the result of inflammatory changes in the vessel wall where it crosses the rib. Obstruction to the flow of blood causes diminution of volume or absence of the radial pulse with a tendency to coldness and pallor of the hand and arm. Gangrene of the fingers or hand has been seen, but usually by the time the obstruction of the subclavian is complete a collateral circulation has already been established which is sufficient to prevent this disaster.

As a rule the symptoms are slow in developing, and a patient presenting herself for the first time will give a history of several months or years before weakness of the hand or some such inconvenient symptom has compelled her to seek advice.

The treatment will depend upon whether secondary pressure symptoms are present or not.

Where a cervical rib is not producing pressure symptoms there is no point in removing it unless the chafing of clothes renders it uncomfortable or, in the case of women, the prominence in the neck is thought to be unsightly.

When pressure symptoms have begun there can be no question that the only sound policy is to excise the rib. The operation is not a difficult one or risky in the hands of a competent surgeon, and the results in early cases are extremely good.

In late degrees of neuritis and in cases in which the subclavian artery has become completely occluded, it is more difficult to give an opinion, because no operation will restore the use of a paralysed muscle giving the reaction of degeneration or reopen a blocked artery. On the other hand, the pressure effects are progressive, and since removal of the original cause may prevent further possible extension of the damage, I think it is wise even in these late cases to recommend operation.

The other two lesions of the ribs which I am now going to describe are in themselves trivial, but they are none the less important because they are a source of considerable pain and annoyance to the patient, and also because they give rise to many mistakes in diagnosis. I refer to "Slipping Rib" and localised myositis of the pectoral and abdominal muscles at their attachments to the rib cartilages.

In slipping rib, the attachment of the tenth costal cartilage to the ninth, or, more rarely, that of the ninth to the eighth, becomes stretched, so that an abnormal degree of movement is permitted between them and when the patient bends forwards or sideways the loose extremity of the rib slips outwards and upwards over the rib above it with a characteristic jerk which produces a sharp stabbing pain. The pain may be only momentary, but as time goes on the muscle attachments to the rib become inflamed and the sharp initial pain is followed by a dull ache which may persist for several minutes or even for an hour or more after the acute pain has passed. Sometimes the inflammation round the rib results in a localised tender swelling, which lasts for a few days at a time and recurs at intervals.

This condition is much commoner in women than in men, and is chiefly met with between the ages of 30 and 50, though I have seen it in a girl of 17. The subjects are generally, but not by any means always, of the hypersensitive type.

The chief interest of the condition lies in its diagnosis, which is often missed because the position of the pain suggests the much better known lesions of the thorax and upper abdominal viscera. The first case which some five years ago drew my attention to slipping rib was a woman who had been treated for 18 months for a whole series of ailments, including pleurisy, gall stones and duodenal ulcer, for the last of which her abdomen had been explored in vain. When describing her symptoms to me she was insistent that the pain was only brought on by certain bending or lifting movements, and by keeping my hand on the painful spot while she rehearsed the movements for me I was able to demonstrate that the pain only occurred when the tip of the tenth rib slipped out of place, and I have seen many cases like hers since.

The diagnosis is usually easily made if one will bear in mind the possibility of slipping rib when dealing with hypochondral pain. The superficial character of the pain, its association with active movements of the trunk, and, above all, its synchronising with the transient displacement of the rib cartilage are usually enough to make it with certainty.

The only treatment which seems to relieve the symptoms permanently is excision of enough of the loose end of the rib to prevent recurrence of the displacement, and the results I have had so far from this simple operation have been satisfactory, though on one occasion it was necessary at a subsequent operation to release an intercostal nerve which had become caught in the scar and had given rise to pain.

Myositis or fibrositis of the muscle attachments to the costal cartilages is met with in two situations sufficiently often to form a definite clinical picture; one of these is at the origin of the pectoralis major from the third costal cartilage, particularly on the left side, and the other is at the epigastric angle where the abdominal muscles arise from the costal cartilages of the eighth and ninth ribs.

As in the case of slipping rib, the subjects are nearly all women, and usually thin women, whose bony prominences are unprotected by fat. The selection of the two common sites is explained by the fact that the third costal cartilage is the most prominent of the series, and the lower costal margin in the region of the eighth and ninth ribs is apt to be pressed upon when leaning against the edge of a table or bench.

Pathologically, the condition is one of a traumatic inflammation of the muscle fibres at their point of origin from the underlying cartilage or bone, resulting in a tender localised swelling, which may be large enough to be quite obvious at a distance and is very painful on palpation and when the particular muscle affected is put into action. As with slipping rib again, the diagnosis is often missed because the simple explanation is not thought of and some much more unusual and more serious lesion is suspected.

I frequently see these cases in the Out-Patient Department, and they generally come up with one of three diagnoses—gumma, tuberculous rib or growth of the rib. Now, gummata of the ribs are rare except at the inner end of the first rib and clavicle. Moreover, a gumma usually produces a more diffuse swelling, and the skin over it soon becomes red and inflamed. Tuberculous disease of a rib very seldom affects the costal cartilage except in very young children, and in the absence of a cancer of the breast a growth of a rib is so rare that it should be one of the last things to think of. In case of doubt a radiogram will show definitely if a growth be present.

The ideal treatment is to rest the affected muscle until the inflammation has entirely subsided. In the case of the pectoral muscle, strapping the chest and wearing the arm in a sling will usually effect a cure if persisted with long enough, and diathermy is also helpful. The results are apt to be disappointing, however, because the patient in whom the lesion occurs is generally of the working class, and is unable or unwilling to carry out the treatment properly. Recurrence is therefore common.

In the costal margin type it is much more difficult to ensure complete rest of the muscles, and few patients will consider their state bad

enough to warrant a week or more in bed. Strapping is of little use, and attention must rather be paid to the prevention of pressure on the inflamed area by means of a pad of wool.

In a very persistent case of this sort recently I divided some of the fibres of the rectus muscle at their attachment to the painful area of the rib, hoping thereby to secure sufficient rest while they were healing to allow the inflammation to settle down.

It is too early yet to tell what the result will be, but I believe that the operation is justified in some cases which have failed to react to less heroic measures.

The Passionate Medico to his Love.

AH, honeyed, honeyed heart, blood sugar free,
Beat close on mine in murmurless rhythm tuned !
Ah, septic, septic kiss with ecstasy
From streptococci viridans immuned !
Through portals alkaline and tonsilless
Let me feel cool the motion of thy breath,
Or swoon anæsthetised 'bove thy caress !
Thy vaso-motors would suffuse pale Death !
Press close that I may feel thy blood's soft urge
With pressure low and hæmoglobin right,
Whose polymorphonuclears emerge
In true accord with every leucocyte.
Then let me stroke thy dark hair's glory, seborrhœa free,
With every ductless gland attuned harmoniously.

—*Life.*

A Case from the Neurological Department.

A Case of Idiopathic Narcolepsy.

ALMA R——, æt. 23, was admitted to Ruth, under Dr. Symonds, for attacks of muscular weakness following laughter, which she had complained of since 1921. There was no family history of note except that the patient's mother attended Guy's for neurasthenia in the Out-Patient Department; psychotherapy appears to have cured her completely.

There was a history of good health until the onset of the first attack, which occurred after a hearty burst of laughter. On this occasion the muscles of the trunk, limbs and face became flaccid and she fell to the ground; she was, however, perfectly conscious, although unable to move for about 30 seconds. The whole condition passed off suddenly "like waking from a dream," and she felt in no way the worse for having had the attack. The attacks came on with no definite aura, although she had sufficient warning to clutch anything near at hand and so break her fall; nor

May we suggest two uses for the waste flat roof at the top of the Main Staircase in the Dental School?

1. A Recovery Room for those who have recently ascended the Main Staircase aforesaid;—or, better still,—

2. — as a convenient spot where overwrought dressers might absorb, inter alia, the health-giving rays of the sun.

was there incontinence of urine or fæces. This epileptiform seizure had occurred in various places —at dances, at picture palaces, and at home— and on each occasion after hearty laughter. In consequence, the patient tries to control her laughter, but in unguarded moments a seizure occurs. The condition is aggravated by heat, when she sometimes feels a weakness unprovoked by laughter. On these occasions she can usually resist the onset and the weakness passes off. In addition to these symptoms she has recently complained of drowsiness, deep sleep coming on at odd intervals during the day. Each fit of sleepiness is heralded by a peculiar headache, which she describes as " a numbness of the brain." On experience of this, resistance merely delays the onset, a sleep in a chair dispelling the headache immediately.

The patient is a healthy though somewhat pale-looking girl, with good intelligence ; she is worried about her condition, feeling extremely self-conscious in public. Physical examination revealed nothing. While in hospital she has once or twice fallen asleep in a chair, and on one Sunday, after visiting hours, she fell asleep in bed. On awakening she felt very frightened and unable to move, but the whole thing passed off suddenly " like waking up." The following Sunday, again after visitors had left, she was suddenly attacked by muscular weakness and sank into a chair ; this she attributes to the excitement of visitors.

This is a fairly typical case of idiopathic narcolepsy as first described in this country by Dr. Adie in the September, 1926, issue of *Brain* (Part 3, Volume 49). Dr. Adie reported a series of 20 cases similar in almost every respect. He describes the complaint as a disease *sui generis*, in which two conditions are present. Firstly, epileptiform seizures brought on by emotion, usually amusement, but sometimes fear or sudden shock ; and, secondly, recurrent cataleptic attacks preceded by a bursting sensation in the head. In a few cases consciousness was maintained throughout the attack, but more commonly the condition exactly resembled true sleep. In these cases Dr. Adie found the male incidence greater than the female in the proportion of 17 to 3, the age onset varying from 15–45. The cataleptic state lasted on the average from 15 to 20 minutes, but in one case lasted from Saturday evening to Monday morning, the patient spending a cataleptic week-end. Various treatments were tried on the suggestion that the disease was primarily an endocrine upset, but rest seemed the only treatment which even lessened the frequency of the attacks.

The patient described above has had her sella turcica X-rayed for evidence of pituitary tumour and her basal metabolism and sugar tolerance estimated. The basal metabolism shows a rate which is definitely below normal limits, being 31.8 calories per square metre per hour—7.6 per cent. below normal. This is the only positive finding.

My thanks are due to Dr. Symonds for permission to publish this case.

J. R. R.

"Rest" in the Treatment of Cancer.

THE human body does not always fall a ready victim to malignant disease. It puts up a fight, and at times a truly plausible one. It is therefore the duty of the medical man to assist the body in this fight.

But how often do we employ " rest," the greatest of all our treatment for acute and chronic diseases, as a means for aiding the body in its efforts against cancer ? Not that we can hope for a simple cure of the disease in this manner, but as a means preliminary to medical treatment so as to attain the best results.

The ready spread of carcinoma via the lymphatics is well known, and we realise the significance of it. The fact that the chief method of driving on the lymph with its carcinoma cells is by the contraction of the muscles is appreciated too. How often, however, is a patient with an early carcinoma of the breast ordered to rest " her arm," preliminary to operation, so that the possible spread of the cancer cells via the lymphatics should be minimised ? It may be just those few cancer cells dislodged by the movement of the patient's arm, that may possibly be " missed " in the operation and eventually cause the patient's death. How often does one see carcinoma rigorously handled, regardless of the fact that the onward propulsion of carcinoma cells may materially affect the prognosis ?

Again, in carcinoma of the tongue, the rapid spread is regarded by Heidenhaim " as due to the contraction of the lingual muscles constantly forcing on the cancer cells." What more logical treatment therefore to pave the way for radical treatment than by insisting on " rest " of the tongue, and thus forbidding speech.

Lastly, to take but a third example, a sarcoma in a limb. With sarcoma, as is, of course, well

known, malignant cells are easily dislodged and ultimately form metastatic deposits elsewhere. Movement will, mechanically, lead to the ready detachment of such embolic.

In the case of a limb possessing a newly-formed thrombus in one of its veins, vigorous movement would be regarded as sheer murder. In the case of a sarcoma, constantly in danger of shooting off emboli, we apparently disregard all our teachings. The limb is not even immobilised with a splint, and the patient is allowed to go home from out-patients "until written for."

These are but three examples to show that although no claim is possibly made to cure cancer by rest, nevertheless, preliminary to operation—if possible and advisable—it will at least serve to safeguard the patient's interests and, by attention to what may seem a mere detail, increase our number of "complete cures."

There are many early cases of cancer, and especially sarcoma, which should be almost regarded as "take-in" cases. As this is, however, impossible, at the very least, by instructing the patient to "rest," we may obey one of our modern principles of treatment, which is that "prevention" of any further spread is better than "curing" that spread after it has occurred.

Lastly, the success obtained by the treatment of tuberculosis by open air "rest" treatment should make us employ similar treatment for increasing the vitality and resistance of the body in its fight against cancer. It should be employed not only as a last resort for inoperable cancer, but it should be almost a routine that all cases of "radical" operations for cancer should subsequently have a period of open air treatment. As Sampson-Handley writes: "The resemblance of the reactive or defensive processes in cancer to those seen in tuberculosis also strongly suggests the advisability of open air treatment in the more chronic cases of inoperable cancer. Experience has convinced me of its value in checking the disease."

S. M. COHEN.

Obituary.

William Guy Pinching.

ALL old Guy's men who entered the Hospital during the years 1902 to 1909 will mourn the loss of the late W. G. Pinching.

He came to Guy's from Oxford in 1902 and qualified in 1908, afterwards holding the appointments of Assistant House Surgeon and House Physician to Dr. Newton Pitt.

During these years he was a regular member of the Rugby football team, and gained his County Cap for Kent.

No one who played in the pack at that time will forget his characteristic pluck and untiring energy. He never shirked going down to the ball or doing his best for his side in tight scrum work, always coming up with a smile and a bleeding mouth.

These qualities endeared him to his patients in his large country practice in after life. He never shirked work, treating rich and poor alike, and encouraged many back to health with his wonderful sense of humour and cheery smile.

I have been intimately associated with him since he has been in practice at Frampton-on-Severn, and have never known a medical man gain such popularity amongst patients of all classes.

He died in his chair while reading the newspaper after tea instantaneously from angina pectoris.

He leaves a widow, a son and a daughter.

The residents in the villages in which he practised are subscribing for a memorial to his memory, and this is to take the form of a house, to be built on Frampton Green for his widow to reside in.

This is proof of the appreciation of his 15 years' work as a country doctor.

ARNOLD ALLCOCK.

Speciality.

"EATAN"—ORGANOTROP, NUTRIENT AND RESTORATIVE

ALFRED DEHEZ, Distributing Agent, 28, Bond Road, Surbiton, S.W.

"EATAN" is a dark brown liquid similar in taste to slightly salted Meat Extract. It consists of a complex of animo acids, hydrolysates of blood, bones, connective tissue and secretory glands.

It is a Nutrient and Restorative invaluable in cases of malnutrition, tuberculosis, osteomyelitis and inoperative malignant tumours, as its products are rapidly absorbed and promote "the filling of cells." It renews the appetite, and after a short time gives a feeling of better health. Weight is gained, and in many cases a cure is effected.

It should be taken twice daily for long periods and always diluted, preferably in soup.

The cost is moderate, as the doses are small. Adults ½ to 1 teaspoonful; Children 3-4 drops for every 10 lbs. of their body weight.

"Eatan" has been thoroughly tested and approved by many doctors both in England and on the Continent. Further details will be gladly sent to Medical men on application to the above address.

Guy's Hospital Ladies' Association Garden Fete.

THE following is a Statement of Receipts to date in connection with the Garden Fête recently held in the grounds of the Hospital by the Ladies' Association. When all the outstanding money is paid over and accounted for, the net result will be little short of £2,000. The thanks of the Hospital Governors have already been officially conveyed to the members of the Association for this handsome contribution towards the funds of the Institution, and great credit attaches to the Ladies who have by their hard work and interest happily made the Fête so great a success. We congratulate them very heartily on the additional support they have thus been able to render to the urgent financial requirements of the Hospital.

STATEMENT OF RECEIPTS.

	£ s. d.	£ s. d.
Sale of Tickets—		
Per Ladies' Association Committee	63 6 0	
Per Hospital	50 16 0	
		114 2 0
Entrance Money (taken at Hospital Gates)		64 19 0
Special Contributions		45 16 6
Tea Room Net Receipts		118 2 5
Stalls, etc.—		
Banstead, Sutton and Orpington Branch	50 12 4	
Children's Clothing Artificial Flowers & Fancy Articles	95 13 1	
Decorative & Fancy Articles	41 0 0	
Doll's House	105 0 0	
Dulwich and Denmark Hill Branches	54 9 8	
Flowers & Garden Requisites	40 0 0	
Garden Produce	50 0 0	
Governors' Ladies	354 17 7	
Ices, Light Refreshments & Devonshire Cream	49 18 2	
Ices, Strawberries & Cream & Fruit	102 9 6	
Men's Stall	43 0 0	
Perfumery	25 4 0	
Provisions	161 0 0	
Rummage Sale	27 4 8	
Southwark Branch	20 11 0	
Toy Land and Wheel of Fortune	91 13 7	
White Elephant	55 1 7	
		1,367 15 2
Games, etc.—		
Flower Garden Competition	39 1 0	
Dancing	31 7 6	
Guides and Parcels	5 18 7	
Palmist	6 14 0	
Pennies on a Plank	11 7 2	
		94 8 3
Students—		
Walking the Line	2 18 9	
The Ringer	18 14 6	
Darts	2 12 2	
Square Deal	8 6 11	
Stake Your Claim	5 0 6	
Penny on Dish	9 16 4	
Hidden Note	5 3 1	
Pick My Pocket	5 10 0	
Cocoanut Shies	13 5 0	
Racing	11 9 9	
Ascot Stakes	5 19 0	
Sweep on Ascot	2 5 0	
Raffle, Dressing Case	4 10 0	
Raffle, Champagne	1 0 0	
Miscellaneous	1 13 11	
		98 4 11
Total to date		£1,903 8 3

(A few additional receipts are expected.)

MAY F. FAWCETT,

Hon. Treasurer, G.H.L.A.

June 29th, 1927.

Speciality.

MEDICAL SICKNESS ANNUITY & LIFE ASSURANCE SOCIETY, 300, High Holborn, W.C.1.

THIS well known Society, composed entirely of Medical men, has added to its usefulness by granting loans to the younger members of the Profession just starting on their career. This should prove a boon to those in need of Capital to purchase Practices, and they cannot do better than avail themselves of this offer, the terms of which are very reasonable.

Further particulars will be gladly forwarded to those interested on application to the above address.

Dust, or thy Name is as Mud.

THE following play is believed to be by Tchekoff, who, if he wrote it at all, must have done so under the stress of Take-in, when he was a medical student in Moscow.

DUST, OR THY NAME IS AS MUD

Scene—A surgical ward. Two beds are seen against the wall, one empty, the other containing a patient. Between the beds is a sink and a testing cupboard. A junior pro. is dusting the beds. A Ward Clerk is seen seated at a table in the middle of the stage, and is making spasmodic attempts to write a report.

Ward Clerk (*sadly*) : Always I seem to be writing reports. Nothing else happens. Life is very dull and grey. [He writes in silence for a few minutes].

Nurse : See, Mr. Brown. Here is a jar of urine from No. 21 to be tested.

Ward Clerk (*laughing hollowly*) : Yes, yes. Thank you, Nurse. Always it is the same. Colour, yellow ; specific gravity, 1015 ; no sugar, albumen or blood. Why is there never any sugar ? It would relieve this dreadful monotony. [He walks to the window and looks out.] Ha, it is raining. Less people will be out of doors, less people will be run over. So much the better. Do you know, Nurse, I dread these nights on the Take-in. When at last the Dressers have finished their interminable supper, and the H.S. has made his rounds and I can at last drag myself to bed, every footfall I hear is that of the porter coming to rouse me, every motor which passes seems to be an ambulance packed with urgent cases. I get out of bed, I pace the room, I cannot sleep. Everyone round me is sleeping peacefully. I alone am racked with anxiety. [He walks about excitedly.]

Nurse : Yes, I have often heard Sister say that you Ward Clerks are dreadfully over-worked.

Ward Clerk : You cannot understand the worry, the responsibility, I have to bear. [He sinks into a chair and covers his face with his hands.]

[Enter Sister. She speaks in a toneless voice.]

Sister : Someone has been spilling ink on my floors. Little black dots on the linoleum.

Ward Clerk (*starts nervously to his feet*) : It is not I. Really, Sister, it is not I. I would not dream of spilling ink. [Sadly] Life is black enough without that.

Sister : I did not accuse *you*, Mr. Brown. All I said was *someone* has been spilling ink on my floors. You should not be in the wards now. Between 3.30 and 5.30 is tea time.

Ward Clerk : No, Sister. I am very sorry, Sister ! [Exit Ward Clerk.]

Sister : Nurse, that specimen of urine must be thrown away. Please do not forget that Ward Clerks must not test urine before 11.30 or after 11.45.

Nurse : Yes, Sister. [Empties jar away into the sink.]

[Noises without. Enter the H.S. and two Dressers with a patient on a trolley. They put the patient on the bed and arrange screens round him.]

H. S. : Here is a new case, Sister. Where is Mr. Brown ? We must do nothing before he arrives and examines the patient.

1st Dresser : These Ward Clerks are never here.

2nd Dresser : No, they do not realise their importance in the hospital. [Enter Brown, looking depressed.]

H. S. : Ah, my dear Brown, we are all waiting for you. If you would just get every detail from this patient, test his urine, write a full report, get the X-ray plates and have him up in Theatre IV in five minutes, we shall be all ready for you.

[Exeunt H.S. and the two Dressers.]

Ward Clerk (*walks up to the bed*) : Now, what is your name, mister ? [Getting no reply he walks to the patient's side and lets the light fall on him.] Aha, he is unconscious ; so much the better. [Thoughtfully]—How callous I am growing. These reports are so tiring. [Writes a few words.] I seem scarcely ever to sleep.

Sister (*tonelessly*) : Someone has been spilling ink on my floor. [Exit Sister. Nurse begins to dust. She upsets two vases of flowers and a rack of X-ray plates, which she pushes into a patient's cupboard.]

Ward Clerk : Why are you always dusting ? I am like one of those scraps of dust. No sooner do I settle down than a broom, in the shape of the Registrar or the H.S., sets me moving. Life is very sad. There is no spark in my cheerless breast. Where is that specimen of urine ?

Nurse (*loftily*) : Down the sink !

Ward Clerk : Life is like that. Everywhere the cup is dashed from me. I never find time to write a report.

Nurse (*tartly*) : Exactly what the Registrar said yesterday.

[A constrained silence falls on the ward. The sun has set, and gusts of rain splash against the dim windows. The conscious patient champs a banana thoroughly. The darkness deepens. The telephone bell suddenly rings. The Nurse answers it.]

Nurse : There are six more cases in the Front Surgery, Mr. Brown.

Ward Clerk (speaking in a strained, unnatural voice) : I cannot bear it. The strain is too great. I must end it all.

[He rushes to the testing cupboard, finds he has forgotten the key, and rushes to the other end of the ward to get it. He opens the cupboard and takes down bottle after bottle marked "Poison," only to find them all empty.]

Ward Clerk : Why are all these testing bottles empty, Nurse ?

Nurse (proudly) : Amongst all good nurses it is an unwritten law to keep them empty.

[Ward Clerk utters one despairing shriek, snips his jugular with a pair of scissors, and expires in the front of the stage. Exit Nurse hurriedly. The light sinks lower. Enter Sister.]

Sister : Someone has been spilling ink on my floors [exit].

[The light sinks lower still and then goes out completely.]

[*Curtain*]

P. V. R.

A Dream of Delight.

PROFESSOR THORNTON ROSE, the well-known authority on dental anatomy, replaced his glasses and once again read the letter he had just received :—

"Dear Professor,—

"I thought you would be interested to receive a specimen which I discovered whilst on my last exploration for Simian traces in Simla. It is a tooth of the extinct Dragonis Vulgaris, of which so few traces have been found. Being of such large dimensions, I have had to send it in a packing case.

Your friend,

"L. I. EWELL"

It was characteristic of Colonel L. I. Ewell that he should so calmly announce the greatest fossil discovery of the age. As all evolutionists know, the Dragouns Vulgaris was the largest creature that ever lived on this earth, it's length only being rivalled by certain species of Golfus Drivus. Some authorities place its length at 150 feet, while a few even deny its existence. One-third of its overall was occupied by its head, but its brains were not developed in proportion. It occupied a class by itself, as you may readily understand, and it is referred to by many authorites, such as Grimm and Hans Anderson.

In appearance it is a large type of lizard—only more so. On the margins of both jaws it had dermal appendages, which had singular human characteristics. So now you can guess how excited the old boy was. Carter Paterson delivered it all right in a case about 5 feet cube. Feverishly the Professor unpacked it and exposed to view an enormous tooth, exactly like a magnified human molar, in wonderful condition. Nothing could hold the Professor's delight and joy. He felt the smooth enamel almost lovingly. What bold cusps and deep fissures it had. He wanted to get a mat and go down the buccal side and up the lingual. His enthusiasm knew no bounds.

By the aid of a saw he managed to make a cross section of a root. He now needed no microscope, the structures were plainly visible. The osteoblasts of the cement were like spiders, the dentinal tubes almost appeared like gas pipes, while the granular layer of Tomes was like a ring of star fish.

His next problem was to make a vertical section. The enamel looked formidable. He wondered how much formic acid he would need, and how long it would take to decalcify it. After much effort, however, he managed to cut a section, which he smoothed down with a bath brick. What he saw threw him into spasms of delight.

There were enamel prisms looking like the pillars of ancient Rome with nobs on their sides. Some were branched and some were tapered, thus according for the vexed question of the increased external area. The dentinal tubules were now most evident, and where he had cut through them he could see the spaces occupied by the fibrils, and there was the disputed sheath like the insulating rubber round an electric cable.

But the odontoblasts were the things. There they were, looking like small sausages, all packed side by side, and having long tails which projected into the tubules. He could see all the processes connecting them together, but what was more, where he had cut across them he could see all their internal complications. These took the form of a cement-mixing apparatus, and the Professor could already visualise the calco-spherites being made in this, and distributed along the tubule. What about those theories of dialysation now ?

Internal to the odonotoblasts was a soft-looking substance, which reminded the Professor of a potato mash. Here, however, his observations were interrupted by someone calling, "John, what are you rambling about ?" and, with a start, he woke up, vowing that he would never again have sausage and mash for supper.

Correspondence.

Mercurochrome Injections.

DEAR SIR,—With reference to the "Notes on Two Cases from the Nose and Throat Department," which appeared in the current number of the Guy's Hospital GAZETTE, a slight error has crept in in connection with mercurochrome injections performed by myself, and this, I think, should be corrected in view of the increasing use of this drug.

The solution that I employed was not a 10 per cent. solution, but a 0.4 per cent. solution—that is to say, a 1/250 dilution. In my opinion this concentration of the drug is probably the highest that can be employed with safety, although I am quite aware that other observers have used concentrations of 1/200.

Believe me,
Yours faithfully,
J. W. H. EYRE.

Bacteriological Department,
Guy's Hospital, S.E.1.
21*st June*, 1927.

An Appeal for a University of London Sports Ground and Boathouse.

SIR,—May we ask the courtesy of space in your columns to appeal to the general public for support in a cause which, we believe, will directly interest a great number of your readers.

That cause is the provision of a Sports Ground and Boathouse for the University of London.

The student life of this great University—the largest in the Empire—has long struggled gallantly towards that ideal of unity which is its natural birthright. But the force of circumstance has so far been too strong to permit of complete success. Scattered as are her Colleges and Schools throughout the Metropolis, and scattered as are her External Students throughout the world, considerations of time, of distance, and of expense have proved a heavy handicap, and, moreover, until now London has lacked that which is possessed by nearly every other University in the land—the places of common assembly where all, by tradition and custom, habitually foregather.

But the tide is on the turn. Already, by the acquisition of the Bloomsbury site, a great centre has been provided for the development of the teaching, administrative and social life of the University. If to that can be added centres for inter-Collegiate and inter-University contests, whereby athletics both on land and water may advance, *pari passu*, with academic growth, the University of London will at length have come into her own, and through the loyalty and devotion of her students and graduates will take her proper place as one of the great educational rallying points of National and Imperial unity. To achieve this purpose money is required—not a great deal in view of the importance of the object, but more than the University can find from her own resources. The present position may be summarised as follows :—

For the Sports Ground 28 acres of grass land at Motspur Park, near New Malden, have actually been acquired, and for the Boathouse 2 acres at Chiswick. Taking into account the purchase price, together with the cost of initial outlay and the provision of an endowment fund to meet part of the annual running expenses, the total sum required is £74,000. Towards this £14,300 has already been privately subscribed, £12,500 of that amount having been provided within the University. For the remainder we now appeal, and in making our appeal we should like to add that the list of private subscriptions is headed by H.R.H. The Prince of Wales, who has graciously expressed his keen interest in the proposals and his hope that funds will eventually be forthcoming.

Cheques should be made payable to the University of London Athletic Appeal Fund Account, and forwarded to the Financial Officer, University of London, South Kensington, S.W.7, who will gladly furnish any further information on the subject.

We are, etc.,
ROSEBERY,
Chancellor of the University of London.
W. H. BEVERIDGE,
Vice-Chancellor of the University of London.
G. ROWLAND BLADES,
Lord Mayor.
H. J. WARING,
Chairman of the Athletic Appeal Committee.
June 22*nd*, 1927.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office :—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men* (*Medical and Dental*), **12s. 6d.** Post Free, payable in advance.

Reviews.

Medical Laboratory Methods and Tests. By HERBERT FRENCH, M.A., M.D., F.R.C.P., and TALLENT NUTHALL, M.D. 4th Edition. Published by Messrs. Baillière, Tindall & Cox. *Price 7s. 6d.*

THE fourth edition of this excellent little book comprises some 220 pages. Intended as a small handbook for use by students and practitioners who have not the facilities of a large laboratory at their disposal, it serves its purpose admirably and of the numerous tests only the simpler methods are described, and those methods which can be performed by the ordinary busy general practitioner.

The book comprises some ten chapters, which deal concisely but, at the same time, completely with the examination of the fluids of the body and of the substances obtained from them. Bedside methods have been excluded, as the book is intended as a small handbook for the medical laboratory.

Besides the descriptions of the various tests and microscopical examinations, brief paragraphs are included pointing out the importance of the findings obtained, and these are particularly instructive and useful to the ward clerk commencing in the medical wards. The book is arranged in an attractive manner and is well illustrated.

Sport.

Cricket.

Inter-Hospital Cup.

1st Round.

Guy's v. Royal Dental Hospital.

PLAYED at Honor Oak Park on Tuesday, May 31st, resulting in a win for Guy's by 151 runs. Pye-Smith batted extremely well for his 80, and only gave one chance. The bowling of the Royal Dental Hospital was quite good, especially that of Humpherson, who has bowled for Worcestershire in his time. Curtis made a valuable 50, and went on to take 4 wickets for 12 runs. For the Royal Dental Hospital, Humpherson and Wolfendale were the only batsmen to shape at all confidently to the bowling of Durr, Curtis and Clarke.

Scores—Guy's 230 (Pye-Smith 80, Curtis 50); Royal Dental Hospital 86 (Curtis 4 for 12).

2nd Round.

Guy's v. London.

THIS match was played at Hale End on Thursday, June 9th, resulting in a fairly easy win for the Hospital by 6 wickets. Durr and Clarke shared the bowling against the London Hospital, who batted first, the former meeting with success early on, and at one time 4 wickets were down for 42 runs. At lunch the score stood at 128 for 6 wickets. Owing to lack of variety in our bowling the tail of the London Hospital batsmen "wagged" to some effect, and they closed with the respectable total of 193.

Guy's opened with Pye-Smith and Williams at 3.20 p.m. At tea, at 4.30 p.m., Guy's had scored 98 for 1 wicket, Williams getting out to the only poor shot he made in a rapidly compiled 48. The bowling of our opponents did not seem to bother our star batsmen to any noticeable extent, and both Garland and Spence scored freely off Prest, a bowler who has played for South Australia. The most valuable contribution to our innings was undoubtedly that of Pye-Smith. In compiling his 63 he played with fine restraint, and tided the side over the most anxious part of the match.

The next round of the Cup, the Semi-Final, is against St. George's, probably our highest fence. We have missed Van Schalkwijk badly in our Cup matches, his bowling having been our greatest asset in previous years.

Scores—London Hospital 193 (H. G. Prest 36; Durr 6 for 89); Guy's 210 for 4 wickets.

Guy's.

Pye-Smith, c. Waring, b. Prest	63
Williams, b. Jekyll	48
Garland, l.b.w. b. Prest	31
Spence, not out	36
Ensor, c. Kendall, b. Prest	4
Clarke, not out	17
Extras	11
Total (for 4 wkts.)	210

Durr, Eustace, Preen, Hutchinson and Catchpole did not bat.

Guy's v. Honor Oak.

HONOR OAK had their revenge for last year's defeat by the narrow margin of 12 runs. J. H. Lockton took 5 of the Hospital wickets, and proved rather difficult to score off. Pye-Smith was the only batsman to make a stand for the Hospital at the start. Towards the end of the innings Van Schalkwijk and Eustace made a good stand and added 26 for the last wicket. Curtis bowled well for the Hospital, his average being 6 wickets for 40.

Scores—Honor Oak 119, Guy's 107.

Guy's	
Pye-Smith, run out	40
Williams, b. Lockton	7
Spence, l.b.w. b. Maxwell	10
Curtis, c. Lockton, b. Maxwell	0
Ensor, b. Maxwell	1
Clarke, b. Lockton	5
Durr, b. Lockton	0
Van Schalkwijk, b. Lockton	18
Preen, b. Lockton	0
Hutchinson, b. Maxwell	4
Eustace, not out	8
Extras	14
Total	107

Tennis.

Nurses' L. T. Cup.

1st Round.

Guy's v. St. Stephen's, Fulham.

THIS match took place on Wednesday, May 18th, at Honor Oak Park, and was won by Guy's by 6 sets to love.

In the opening match Guy's first pair were opposed by Sister Hamilton and Nurse Williams. Both pairs were erratic at the start, and the score went to 2 all before Guy's showed their superiority They won the next 4 games and set, attacking strongly, chiefly through good volleying by Nurse Stubbs and strong forehand driving by Nurse Johnson.

St. Stephen's improved in the next set and won the first 2 games, Nurse Williams playing well at the net, while Sister Hamilton played very steadily from the base line.

The Guy's pair then attacked strongly and won the next 6 games. The third set went to 6–4 before being won by Guy's, who became less accurate, while the St. Stephen's pair lobbed very well when their opponent's advanced to the net.

In the B match, Nurse Major-Lucas and Nurse Wilson represented Guy's, while Nurse Drage and Sister Laing played for St. Stephen's.

Sister Laing did some fine work on the base line and worked very hard, her partner not having a busy time at the net, as the Guy's pair avoided her by lobbing and cross driving. For Guy's, Nurse Major-Lucas served and drove well, while Nurse Wilson was very steady.

We were especially pleased to welcome Miss Booth, the Matron of St. Stephen's, and Miss Edwardson at the Cottage. Miss West, Home Sister of Guy's, acted as hostess for Miss MacManus, who was unavoidably prevented from being present.

Tea was served on the lawn in lovely sunshine, and a very pleasant and enjoyable afternoon was spent by all.

Referees—Mr. Sale and Mr. Trick.

Senior Inter-Hospital L. T. Cup.

1st. Round.

Guy's v. King's College.

THIS match provided the few supporters with some delightful tennis. On paper King's appeared to be easily the better team. It was not until all but two matches had been played that Guy's could claim a win. At the close of the singles matches rain fell heavily, and after the tea interval the doubles were played on hard courts, kindly lent by the Denmark Tennis Club. In the singles each side claimed three matches.

Trafford was very much at a disadvantage in his match against Hassan owing to his foot, which gave him pain. After losing the first set 6–8, he lost the next badly, 1–6, to his opponent, who favours the chop both in attack and defence.

Van den Broucque and Mills had a hard struggle in which both showed at times some good form, but the excellent driving and clever court craft of the latter proved a little too much for Van den Broucque.

Bruce-Pearson, after losing 5–7, won the next two sets, 6–4, 6–2, from Bell, a creditable performance. Bruce-Pearson played very well, although he might have come up to the net more often in the first set.

No. 4 court found Padre doing his utmost to beat Arkles, a player who miraculously returns the best of shots. Arkles thoroughly deserved his win (6–4, 9–7).

Boyle lost 2–6, 5–7 to Cox, who was decidedly the better man. Although the former, who possesses a fine style, produced some good shots, his form this season has not been very satisfactory. He can do much better.

Crombie did very well in beating Howard 6–4, 7–5, and proved a hugh success. He did his full share towards winning the match against King's.

The doubles afforded some brilliant tennis. Van den Broucque was outstanding in these. His service, which he varies considerably, is a valuable asset, while his driving and volleying were delightful to watch. Trafford's overhead play was very sound, but his backhand was a little weak.

Our second pair—Bruce-Pearson and Boyle—had some bright periods, particularly in their match against Mills and Bell, a very fine combination, but again Boyle showed himself to be very erratic, while his service was weak on account of many double faults.

Arkles and Crombie, the third pair, did very much more than their bit by beating Padre and Howard, and also Mills and Bell. The success of Arkles and Crombie rather decided a win for us.

Trafford and Van den Broucque—
Beat Hassan and Cogswell 8–10, 6–3, 6–3.
Beat Mills and Bell 7–5, 6–4.
Beat Padre and Howard 6–1, 6–2.

Bruce-Pearson and Boyle—
Lost to Mills and Bell 3–6, 6–3, 2–6.
Beat Padre and Howard 6–3, 6–2.
Lost to Hassan and Cogswell 3–6, 4–6.

Arkles and Crombie—
Beat Padre and Howard 6–2, 6–3.
Lost to Hassan and Cogswell 1–6, 2–6.
Beat Mills and Bell 7–5, 10–8.

Junior Inter-Hospital L. T. Cup.

2nd. Round

Guy's v. Royal Dental Hospital.

PLAYED at Honor Oak Park on the afternoon of Thursday, June 23rd. Guy's scored a good win over the holders of the Cup by 8 matches to 3, 4 matches being unplayed.

In the singles Kurtz played well, but was up against a very good opponent, whose combination of steadiness and brilliancy proved too good for our first string. Kurtz held his own well in the first set and, helped by a strong service, four all was called. Johns won the next two games, to take the first set at 6–4. In the second set Johns played aggressive tennis and, though he played well, Kurtz lost the set and match at 6–2.

On the next court Booker was having a bad time. Though at times winning points with brilliant cross-court drives, he was much too erratic, and lost the first set at 6–3. The next set was a repetition of the first, Booker hitting hard while Joseph played steadily, waiting for Booker to make the mistakes. Booker lost this set at 6–4.

Guy's were now two down, but Hollis, on the last court, succeeded in lessening the disadvantage by beating Brown by 6–1, 6–4. Hollis played well enough to beat his opponent, who appeared to be worried by the strong wind that was blowing. On the fifth court Housden was having a great game with Lewis. Opening strongly, Housden quickly went ahead to lead by 4–1 in the first set. Lewis now was getting a length, and by means of accurate lobbing 5–3 was called. Housden won the first set at 6–4. Lewis quickly went ahead in the set, and led at 5–1 and 40 love. Housden won this game by strong driving from the back line and, continuing an aggressive policy, reduced the lead to 5–4. Serving well, Lewis again reached the set point by adding 40 love, but lost the game for 5 all to be called. Lewis led at 6–5, but Housden, finishing strongly, took the set and match at 8–6, thus making the scores Guy's 2, R.D.H. 2. Meanwhile Ellis, on the fourth court, was having a good game. Taking the first set at 9–7, Ellis lost the next at 3–6. The final set was a ding-dong struggle—2 all, 4 all, 5 all and 6 all being called. Ellis then won his service to love and took the last game to win the match at 8–6. Ellis played well throughout, his opponent making him do a good deal of running about.

Gaitskell played a very steady game on the third court, and after a good match won at 7–5, 7–5. Guy's thus led by 4–2 on the singles play.

In the doubles Kurtz and Ellis put up a good show by beating the Dental's first pair 6–2, 6–4. Although not used to playing together, they combined excellently, and after tea defeated the third pair without losing a game.

Booker and Gaitskell only played one match, but this they won well by 2–1. In the second set Booker again was rather erratic, but played well in the third set, his service scoring many points. Gaitskell played well throughout.

Before tea Housden and Gilbert defeated our opponent's third pair very easily, but after tea lost to their first pair after a good match. Gilbert showed improved form, while Housden scored many points with his cross-court drive to his opponent's back hand. Guy's won the doubles by 4 matches to 1.

Scores

C. W. Kurtz lost to Johns 4–6, 2–6.
F. G. Booker lost to Joseph 3–6, 4–6.
S. P. Ellis beat Woodward 9–7, 3–6, 8–6.
D. K. Gaitskell beat Davies 7–5, 7–5.
G. M. Housden beat Lewis 6–4, 8–6.
G. J. Hollis beat Brown 6–1, 6–4.

Kurtz and Ellis—
Beat Johns and Woodward 6–2, 6–4.
Beat Brown and Lewis 6–0, 6–0.

Booker and Gaitskell—
Beat Joseph and Davies 6–1, 4–6, 6–1.

Housden and F. S. Gilbert—
Lost to Johns and Woodward 4–6, 4–6.
Beat Brown and Lewis 6–2, 6–3.

Rugby.

THE Annual General Meeting was held in the Anatomical Theatre on Tuesday, May 31st, at 1.30 p.m., with the President, Mr. F. J. Steward, in the Chair.

The minutes of the previous Meeting were read and confirmed. Mr. Steward and Mr. Fagge were unanimously re-elected President and Vice-President respectively for the coming season.

On the recommendation of the Blues' Committee, the following were elected by the Meeting to hold office for season 1927–28 :—

Captain—J. R. F. Popplewell.
Vice-Captain—W. H. Myburgh.
Committee—
1st Year, to be elected at the October General Meeting.
2nd Year—A. D. J. Lewis.
3rd Year—F. H. B. Spence.
4th Year—G. J. Clarke.
5th Year—G. G. Cameron.
Dental—V. R. Preen.
Hon. Secretary—W. D. G. Jones.
Hon. Sec., " A " Team—G. F. Lashmore.
Hon. Sec., Extra " A " Team—H. A. Constable.
Hon. Sec., " B " Team—P. G. Stainton.
Hon. Sec., " Nomads "—H. C. Muirhead.

The Meeting then closed with a vote of thanks to the President.

Rifle Association.

Armitage Cup. Inter-Hospital Competition.

THE Inter-Hospital Competition for the Armitage Cup for 1926 was held at Bisley on May 25th, 1927—it was postponed from last year on account of the general strike. Two other Hospitals sent teams down—St.Bart.'s and London. The weather was dull, and remained so during the whole afternoon, and this evidently affected the performance of two members of the Guy's team, H. Harding and E. C. Gross, who were far below their usual form. T. D. Wren, who has taken up shooting for the Hospital this season, made a good start by scoring 95 points out of a possible 105 points. St. Bart.'s won by scoring 578 points, which is a record score for the Armitage Cup Competitions, London being second with 559 points.

The scores were :—

T. D. Wren	95
R. L. Duchesne	94
C. L. Stevens	92
H. Richards	90
E. C. Gross	86
H. Harding	83
	540

Swimming Club.

THE annual United Hospital Swimming Club Gala is, by the kind permission of the Bath Club, being held there on Tuesday next. As usual, this event is drawing a large crowd, and the allotment of tickets, since their number is limited, is proving extremely difficult ; therefore a ballot will have to take place.

The heats for the Gala took place on Saturday, June 25th, at Pitfield Street, and left us with our full team, both first and second strings for each event having won their heats. The final of the United Hospitals' Water Polo Challenge Cup, of which we are the holders, will be played out on Tuesday night between Guy's and the winner of St. Bart.'s and University College Hospital.

Hospital Information, etc.

Pass List.

University of Cambridge,
M.D.
E. J. Greenwood

Change of Address.

R. G. Williams, M.R.C.S., L.R.C.P., Long Grove Mental Hospital, Epsom, Surrey.

D. M. Calder, c/o M. S. R. Reynolds, L.D.S., 233, Long Market Street, Pietermaritzburg, Natal.

H. Wayman, L.D.S., Sandown Broadway, Bexley Heath.

Birth.

PURDOM—On June 23rd, 1927, to Dora, wife of H. Neish Purdom, L.D.S.Eng., of 75, Park Lane, Croydon—a son.

Marriage.

TRAFFORD—PORTIONS—On the 18th June, 1927, at St. Paul's Church, Herne Hill, by the Vicar, Dr. Harold Trafford, late of Guy's Hospital, son of Mr. and Mrs. T. B. Trafford, of Scunthorpe, Lincs., to Laura Dorothy, younger daughter of Mr. P. S. Portions and the late Mrs. Portions, of " Braemar," Holmdene Avenue, Herne Hill, S.E.24.

Deaths.

SMALLPEICE—On June 2nd, 1927, Donald Smallpeice, M.R.C.S., L.R.C.P., at the age of 74 years.

FULLER—On May 27th. 1927, William Anderson Fuller, M.R.C.S., L.R.C.P., at Leeds.

EDS. { P.F.S.C. / G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *July 16th, 1927.* *Number 1017*

PASSIM

IT is a remarkable fact that the majority of men who have contributed to the world's knowledge—particularly in the practical application of knowledge—have been renowned for a certain generous simplicity of character. The cynic may comment that concerning the dead hard things are not said—and more so of the pre-eminent dead. However, there does seem to be much evidence that such men as Archimedes, Gallileo, Harvey, Newton, especially Pasteur, and by no means least, Richard Bright, were all men of singular charm.

It may be that persons of attractive manner and honourable personality are selected by a process akin to that operating in Nature and given opportunities, while those with equal ability but ungenerous spirit are pushed to the wall of obscurity Whatever be the explanation, it is a happy fact that these men who absorb the attention by the brilliance of their achievements have handed down traditions of character that grace civilisation.

In Archimedes we visualise a happy man, full of interest in life, overjoyed at the inspiration of the reason for his legs getting lighter in his bath.

In Astley Cooper we picture a man with an infectious laugh, who would enter the lecture theatre and, throwing his leg over the bench, talk gaily to his audience of students, while in Richard Bright we see a kindly man who stimulated a team of men to work enthusiastically under his direction, and incited his colleagues to give over to him for a considerable period, a ward for the investigation of the condition which is now called after him; a man who could ignore completely the activities of rascally fellows who endeavoured to profiteer with quack medicines, using his name as an advertisement.

Something of Richard Bright's attractive character is reflected in the miniature, a reproduction of which we include in this number, by kind permission of Mr. R. Wallace, Bright's grandson.

On Friday, July 8th, the Hospital celebrated the Centenary of the publication of Bright's *Medical Cases*, and we have seldom attended a ceremony at the same time so interesting and thoroughly congenial. There was about it much of the spirit of Richard Bright that Professor Thayer clearly portrayed in his admirable Oration.

Those responsible for the organisation of the Celebration deserve much praise for their excellent efforts in gathering the most eminent representatives of American, French and German medicine for the occasion. Such names as Professor Thayer's, Professor Aschoff's and Professor Widal's—represented by Professor Lemierre—are familiar to every medical man.

At 11 o'clock in the forenoon Professor Aschoff, of the University of Freiburg, gave a Demonstration on the Pathology of Bright's Disease, illustrated by excellent slides. This Demonstration, which was a very clear exposition of modern pathological views on Nephritis, will appear in the next double number of the *Guy's Hospital Reports*. Dr. Fawcett took the Chair and, in introducing Professor Aschoff, pointed out that it was the efforts of men like Professor Aschoff, who sought disinterestedly to eliminate disease from the world, that caused Medicine to have boundary neither by land nor sea.

At 12 o'clock Professor Lemierre, representing Professor Widal, who was very unfortunately unable to be present owing to an illness, delivered a Lecture on the nature of Nephritis.

After the Luncheon, at which Lord Balfour presided, the party proceeded to the Physiology Theatre to hear Dr. Thayer's Oration, which was delivered to a crowded theatre. Lord Balfour welcomed Dr. Thayer with his peculiarly delightful charm of manner, and though professing only a layman's knowledge of medical matters, expressed the opinion that the full significance of the system of team work initiated by Bright had not yet been

(Left to right) Professor Aschoff, Dr. Fawcett, Dr. Thayer, Professor T. B. Johnston, Sir William Hale-White, Professor Lemierre.

(Left to right) Professor Lemierre, H. L. Eason, Esq., Professor Aschoff, Lord Balfour, Professor T. B. Johnston, Dr. Thayer, F. P. Whitbread, Esq., Treasurer, Sir John Rose Bradford, Sir William Hale-White.

realised as fully as it may be in the future, with which we are in most whole-hearted agreement, for not only is single-handed general practice becoming rapidly an impossibility, but also close collaboration of the various specialists seems to us the only way to balance the onesidedness of the type of men, one of whom Dr. Thayer described as specialising in Sinuology. The days of personal feeling and jealousy in scientific controversy are passing—and almost past. One has only to read the earlier publications of medical journals and our own GAZETTE to realise this; with their disappearance the isolated example of Richard Bright becomes an every-day event.

Dr. Thayer's Oration, of which we publish, by courtesy of the *British Medical Journal*, an abridgement in this number, was a masterly review of the life of Richard Bright, and revealed great insight into a character of unusual serenity, a man with generosity of heart and a mind far removed from pettiness. The Oration stimulated the inborn tendency to reverence famous men which has operated since language first enabled legends to be handed down.

After the Oration, Dr. Thayer, Professor Aschoff, Professor Lemierre—representing Professor Widal—and Sir John Rose Bradford were presented to Lord Balfour to receive the Bright Memorial Medal.

Dr. Hurst accepted, on behalf of Mrs. Starling, the Medal which the Medical School decided to award to Professor Starling before his tragic and premature death.

THE *Guy's Hospital Reports* Committee are publishing a special Bright Centenary Double Number at the end of July. This will be a combination of the July and October numbers for this year. We have printed elsewhere a table of contents of the Double Number which will speak for itself, representing very completely as it does the modern views of Europe and America on nephritis.

A Supplement to the *Reports* has also been reprinted from those of 1921 entitled "Richard Bright and His Work"—this, by Sir William Hale-White, delineates Bright's life and contributions to medicine with great clarity, and contains reproductions of the original plates illustrating the granular kidney described in Bright's *Reports of Medical Cases*. This excellent little work is published at half-a-crown by the *Lancet*, Ltd., 1, Bedford Street, Strand, W.C.2.

THE following have been appointed "Clinicals" for the period July to October:—

Messrs. G. T. Townsend.
R. S. De Bruyn.
D. E. Dunnill.
G. W. Rake.
J. K. Moore.
S. C. Lewson.

WE congratulate the Swimming Club on their excellent effort at the Bath Club recently, when they won for Guy's the Inter-Hospital Team Race and the Water Polo match. Mr. DeGruchy is particularly to be congratulated on creating a record for the 50 Yards—time $27\frac{1}{5}$ seconds.

WE offer our very best wishes to Dr. M. E. Shaw who was recently married to Miss Christine Beck; also to Mr. W. R. Spurrell, who was married at Southwark Cathedral on July 1st to Miss Dorothy Griffiths (Sister Front Surgery); and to Mr. W. S. Hunt on the happy occasion of his marriage to Miss — Nicholas, both of whom are well remembered at Guy's.

Bright Centenary Double Number of the "Guy's Hospital Reports."

THE following is a Table of Contents of the Bright Centenary Double Number, a combination of the July and October numbers, of the *Guy's Hospital Reports* which will come out at about the end of July and will cost 25*s*. net:—

The Bright Oration, by W. S. Thayer, M.D., Emeritus Professor of Medicine, Johns Hopkins University, Baltimore.

Clinical Demonstration on Two Cases of Bright's Disease, by A. Lemierre, Professor of Medicine, University of Paris.

Disorders of the Kidneys with Symptoms of Bright's Disease, by L. Aschoff, Professor of Pathology, Freiburg.

Some Observations on Uræmia, by Sir John Rose Bradford, K.C.M.G., M.D., F.R.S., President of the Royal College of Physicians of London.

Bright's Disease without Albuminuria: an Historical Note on the Contributions of Bright and his Successors of the Guy's School to the Study of High Blood-Pressure and its Consequences, by J. A. Ryle, M.D.

Starling's Work on the Physiology of the Kidneys, by M. S. Pembrey, M.D., F.R.S.
Bright's Earliest Published Medical Paper, by Sir William Hale-White, K.B.E., M.D.
The Treatment of Nephirtis with Alkalies, by A. A. Osman, M.R.C.P.
The Excretory Functions of the Kidneys, by J. H. Ryffel, B.Ch.
Syphilitic Nephritis, by G. B. Dowling, M.D.
The Treatment of Chronic Bright's Disease by Decapsulation, by John Fawcett, M.D.
The Association of Chronic Bright's Disease with Obstruction in the Lower Urinary Tract, by A. R. Thompson, Ch.M.
The Tonsils and Nephritis, by E. J. Greenwood, M.B.
Acute Nephritis: Tonsillectomy: Recovery, by A. C. Jepson.
Mental Symptoms in Bright's Disease, by R. D. Gillespie, M.D.
Dermatological Symptoms in Bright's Disease, by H. W. Barber, M.D.
On Enuresis Nocturna, by H. C. Cameron, M.D.
The Urine in Latent and Subacute Septicæmia, by F. A. Knott, M.D.
Malformation of the Kidneys and Development, by G. W. Nicholson, M.D.

Richard Bright: The Man and the Physician.

An Address given at Guy's Hospital on the occasion of the Centenary Celebration,* by W. S. THAYER, M.D., Emeritus Professor of Medicine, Johns Hopkins University, Baltimore, U.S.A.

(*Published by courtesy of the British Medical Journal*).

"For my own part I am very fond of seeing. . . " R. BRIGHT: *Letter to his father 26th June*, 1813.

TO be asked to speak to you on Bright, on this occasion, at the scene of his activities and under these auspices, is an honour of which I am deeply sensible, so sensible that I shall not attempt to thank you.

EARLY LIFE AND TRAVELS

Richard Bright, the third son of Richard Bright, a well-to-do and influential banker of Ham Green, Somerset, was born at Queen Square, in Bristol, on September 28th, 1789, seven and a half years after Laennec. At the private school of Dr. Estlin, near Bristol, he was the companion of Henry, afterwards Sir Henry, Holland, who speaks of him as his "most intimate friend." Later Bright studied at Exeter under the private tuition of Dr. Carpenter, and in 1808 matriculated at Edinburgh, where, during his first year, he devoted himself largely to the lectures of Dugald Stewart, on moral philosophy and political economy, to those of Playfair, on natural philosophy, and of Leslie, on mathematics. The following year he applied to the study of anatomy, working under Hope, Monroe and Duncan.

In the summer of 1810 Bright and his friend Holland accompanied Sir George Steuart Mackenzie on an expedition to Iceland. Mackenzie speaks cordially of his young companions and of Bright's contributions to the study of the botany and zoology of Iceland, which are published in the history of the expedition; he shall, he says, "ever retain a grateful remembrance of the cheerful and ready exertion he always displayed and the unfailing good humour with which he submitted to the cross accidents which sometimes befell us."

The journal of the excursion tells of a number of interesting experiences, one of which, the rather perilous ascent of the Snaefell Jokul, is really well told by Bright, who contributed several excellent drawings to the illustrations. The journey was not without event; they were nearly shipwrecked on their homeward voyage.

On his return Bright attended at Guy's Hospital in London, where he studied under W. Babington, Currie, Astley Cooper, the two Clines and Travers. From association with Babington he gained an interest in geology, and, in the fall of 1811, he contributed to the Geological Society a brief statement on the strata in the neighbourhood of Bristol.

Returning to Edinburgh in 1912, he worked under Gregory, at the same time studying geology and natural history under Jameson, and took his degree of M.D. on September 13th, 1813, with a dissertation "De erisipelate contagioso," on the

* The Centenary celebrated was that of the publication of the first volume of Bright's *Reports of Medical Cases*. Professor Thayer's address, as here printed, was delivered on July 8th. The complete text will be published in the forthcoming Bright Centenary Number of *Guy's Hospital Reports*, when it will be accompanied by a full bibliography.

RICHARD BRIGHT, M.D., F.R.S.

title-page of which is the happily chosen motto : " Fœnum habet in cornu, longe fuge. . . ." (Hor., Sat., Lib. I, Sat. iv) : " He has hay on his horn ; give him a wide berth ! "

He was a member and president of the Royal Medical Society, a students' organisation, to which he contributed a dissertation on " Gangrene " ; and of the Speculative Society, where he was brought into association with companions interested in general literature and the law.

After two terms at Peterhouse in Cambridge he returned to London in the fall of 1813, becoming a pupil of Bateman at the Public Dispensary. In the summer of 1814 he passed some months on the Continent in Holland, Belgium and Germany, where, at Berlin, he studied under Horn and Hufeland, " besides profiting by the acquaintance of other eminent men of science," notably Klaproth, Rudolphi and Heim. Passing through Dresden, he spent the winter of 1814–15 in Vienna, studying with Hildenbrandt, and in the ophthalmological clinics of Rust and Beer. He appears to have had a pleasant acquaintance with many interesting men, especially Jacquin the botanist, Prochaska and the elder Frank. Napoleon at Elba, the Allies in Congress at Vienna, were dining and dancing and struggling with the problems of peace. Bright gives an interesting account of the social pomp and ceremony associated with the occasion, and a not unentertaining description of some of the leading figures as they passed before him at an evening function. His account of a visit to the little prince at Schoenbrunn is rather touching.

The spring he spent in travel through lower Hungary, arriving in Brussels again two weeks after the battle of Waterloo ; here his experiences in the military hospitals are said to have been valuable.

These travels he described in a handsome quarto volume, illustrated with excellent sketches by his own pencil. The book is not written in a sparkling fashion. It cannot be said to betray a lively sense of humour, but the accuracy and catholicity of his observations—geological, botanical, agricultural, economical, ethnological, social, educational, political—his scrupulous objectivity, and the careful details of his descriptions are very striking. It is clearly the work of a keen observer and a serious student. But the book shows something more. It gives the picture of a young man of six-and-twenty capable of observing and describing the strange customs and life of a people new to him with measure and clarity and understanding, seeking out and recognising that which is good, and never allowing a hasty or an unkind criticism to escape his pen. Such measure and such understanding are not common at six-and-twenty ; they are characteristic of Bright throughout his career.

Returning to England he read before the Geological Society a short note on some interesting volcanic formations in Hungary. In 1816 he was admitted Licentiate of the Royal College of Physicians and shortly thereafter was made Assistant Physician to the London Fever Hospital, where he himself acquired a severe fever of which he nearly died. In 1818 he again visited the Continent, spending several months in Germany, the Tyrol, Italy, Switzerland and France.

In 1820 he was made Assistant Physician at Guy's, and resigned his position at the Fever Hospital. In 1821 he was elected Fellow of the Royal Society. Soon after obtaining his hospital appointment, Bright began to teach, lecturing on botany in its relation to materia medica from 1822 to 1825. In 1823 he gave his first clinical lectures, and, in the following year, he was made Full Physician to Guy's Hospital, sharing with Cholmeley the course on theory and practice.* For many years afterwards he shared these lectures with Addison.

There is an amusing reference to Bright in a somewhat facetious note in a contemporary medical journal signed Δ.Ε.Λ. In connection with the programme of lectures for the term the destructive chronicler says we may " . . . almost fancy ourselves in the *seventeenth century*. . . . In the *Practice* of *Medicine, disorders of* the *intellect* will be *reflected* by *Dr. Bright*, of whom it is not too much to say with the poet :

' Natura lo fece, è poi *ruppe la stampa* ! ' "

(Nature shaped him, and then *broke the mould.*)

It was a stimulating period in medicine. After long centuries of more or less blind worship of tradition, of authority and of doctrine, during which that which was most certain in medicine was the rather conjectural art of prognosis, physicians were beginning to use and trust their senses, to investigate and explore for themselves. Morgagni had accumulated and placed side by side in massive volumes the brief clinical story and the description of the anatomical changes in the organs in hundreds of instances of mortal disease or injury. Auenbrugger—neglected for 50 years and rediscovered by Corvisart—had demonstrated how, with our fingers, we may determine the outlines and physical characteristics of the

* How sincerely Bright appreciated this appointment is manifested by his remarks at the anniversary dinner at Guy's Hospital in 1826. " The Chairman next toasted ' The Physicians of Guy's Hospital.' Dr. Bright rose. He said somebody had told him he *must* return thanks. ' Gentlemen,' said the Doctor with great energy, ' I *will* return thanks ; to hold the situation of Physician to Guy's Hospital is to be placed at the pinnacle of the profession. I am thankful—I am proud of a situation which has produced a Saunders, a Babington, and a Cholmeley. . . .' "

contents of the thorax. Bichat, in the few short years of his vigorous activity, had laid the foundations of pathological anatomy; and when Bichat fell, and Bayle, so full of promise, dropped by the way, the genius of Laennec had revealed methods of study which permitted the recognition and fuller comprehension, during life, of many processes which, unrecognised, led to those fatal changes with which they had become familiar in the dead. Freed from their bonds of dogma men were using their senses and their reason in the study of disease.

Bright was fired by the spirit of the times. From the day he entered Guy's Hospital he devoted himself whole-heartedly to the study of morbid phenomena, year after year spending as much as six hours a day at the bedside and in the necropsy room. Occasional notes of cases demonstrated during his visits show how carefully, even at this early period, he observed and noted the recondite; an example is a good description of what obviously was an instance of syringomyelia. For seven years he published little or nothing, but never were seven years better spent. On August 13th, 1826, Laennec died, leaving the legacy of the great work with the immortal descriptions of tuberculosis, of pneumonia, of bronchiectasis, of emphysema, the work which laid the foundations of modern physical diagnosis of the chest. Bright took up the torch and, a twelvemonth later, one hundred years ago, rendered a noble account of his stewardship at Guy's in the form of the first beautiful quarto volume of his *Reports of Medical Cases*. This remarkable collection of observations, clinical and anatomical, was made for the most part during the three years of his service as full physician. Bright points out scrupulously that among the comments and inferences there are some for which he "must bear the responsibility alone. Such are the statements and conjectures regarding the dependence of a peculiar class of dropsies on disease and irritation of the kidneys. Such are some observations on the peculiar changes in the structure of the liver; . . . and such are the hints thrown out on the influence of the peculiar state of the mesenteric absorbents on the symptoms of phthisis."

THE RECOGNITION OF BRIGHT'S DISEASE

He first discusses a group of "Cases illustrative of some of the appearances observable on the examination of diseases terminating in dropsical effusion"—notably ". . . appearances to which I think little attention has hitherto been paid . . . evidences of organic change which occasionally present themselves in the structure of the kidney; and which, whether they are to be considered as the cause of dropsical effusion or as the consequence of some other disease, cannot be unimportant." With these conditions he has "often found the dropsy connected with the secretion of albuminous urine, more or less coagulable on the application of heat. . . . I have never yet examined the body of a patient dying with dropsy attended with coagulable urine, in whom some obvious derangement was not discovered in the kidneys."

The observation that dropsy was sometimes associated with hardening of the kidneys was not new. Aëtius in the fifth century and William Salicet in the thirteenth had mentioned it. In like manner the association of albuminous urine with certain dropsies had been pointed out in 1770 by Cotugno, who quite misinterpreted its significance, and notably by Cruikshank, by Darwin, and, later, by Wells and by Blackall, each of whom noted the presence of renal disease in individual instances; neither, however, recognising its full significance.

Such was the situation when Bright began his studies. In three years of hospital experience he had grasped the situation and was able to make the statements which have been quoted. Bright continues cautiously and judiciously:—

"Whether the morbid structure, by which my attention was first directed to this subject, is to be considered as having in its incipient state given rise to an alteration in the secreting power, or whether the organic change be the consequence of a long-continued morbid action, may admit of doubt; the more probable solution appears to be that the altered action of the kidney is the result of the various hurtful causes influencing it through the medium of the stomach and the skin, thus deranging the healthy balance of the circulation, or producing a decidedly inflammatory state of the kidney itself: that when this continues long, the structure of the kidney becomes permanently changed, either in accordance with, and in furtherance of, that morbid action; or by a deposit which is the consequence of the morbid action. . . .

"Where anasarca has come on from exposure to cold, or from some accidental excess, I have in general found the urine to be coagulable by heat. . . .

"During some part of the progress of these cases of anasarca, I have in almost all instances found a great tendency to throw off the red particles of the blood by the kidneys, betrayed by various degrees of hæmaturia from the simple dingy colour of the urine, which is usually recognised; or the slight brown deposit; up to the completely bloody urine..."

Coagulable urine he has observed not only in these cases of sudden anasarcous swelling, but also "in persons long the subjects of anasarca, recurring again and again, worn out and cachetic in their whole frame and appearance, and usually persons addicted to an irregular life and to the use

of spirituous liquors. . . . In all the cases in which I have observed the albuminous urine, it has appeared to me that the kidney has itself acted a more important part, and has been more deranged both functionally and organically than has generally been imagined. In the latter class of cases I have always found the kidney decidedly disorganised. In the former, when very recent, I have found the kidney gorged with blood. And in mixed cases, where the attack was recent, although apparently the foundation has been laid for it in a course of intemperance, I have found the kidney likewise disorganised."

It is nearly twelve years since he first observed the altered structure of the kidney in a patient who had died dropsical; and he still has the slight drawing made at the time. Then follows an excellent description of four-and-twenty instances of dropsy with albuminous urine, seventeen of which came to necropsy and showed renal disease. On the whole, these four-and-twenty cases represent the ordinary pictures of acute and chronic renal disease—acute hæmorrhagic nephritis, subacute and chronic hydropigenic nephritis or nephrosis, slow chronic nephritis with or without striking general arterial change.

In his summary Bright distinguishes three stages of a disease which he inclines to believe to be progressive. In the first stage the changes consist largely in the cloudiness and mottling of the renal substance; in the second, granulation has begun; in the third, the kidney is sclerotic and contracted with an irregular, nodular surface. It is rather odd, as Rayer points out, that he pays so little attention to acute hæmorrhagic nephritis, of which he described at least one clear instance.

From a clinical standpoint Bright notes the frequency of complicating serositis—pleurisy, pericarditis, peritonitis—and comments on the insidious origin of these complications. He tells of the frequency of "apoplexy" (coma) and "epilepsy." In four of the subjects the heart was found to be hypertrophied. He discusses the chemical reports of Bostock, which show that the specific gravity of the urine, varying from 1006 to 1032, is usually lower than normal and he comments especially on the evidence of diminution in the quantity of urea in the urine and the presence of an urea-like substance in the blood serum in advanced disease.

With regard to treatment he is rather conservative; especially is he sceptical as to the wisdom of the employment of mercury.

The plates are of great beauty, and record that which Bright saw in such a fashion as to make the subject clear to readers of that day and this.

Such are the simple and soberly-written pages in which Bright laid the foundations of our present knowledge of nephritis. Bright's word was widely discussed at home and abroad, criticised by some who spoke arbitrarily, but with authority. The essentials were soon confirmed by the students.

Before going on with the story of his life, let us pass rapidly over his later publications on this subject. In his second volume of *Reports*, published in 1831, he protests (p. x) against a misunderstanding on the part of some of his contemporaries who had assumed that he believed that coagulable urine was observed only in the presence of organic renal disease and, quoting the careful statements made in his original publication, he ends with the words: ". . . .I am inclined to believe that the functional derangement of the organ may sometimes precede a structural change for a period of many weeks and many months and that the kidneys of a patient thus affected, who has been cut off early by some disease, may afford very little evidence of diseased structure."

He repeatedly mentions pial (arachnoid) œdema in individuals dead of uræmia and points out that the same cerebral manifestations, convulsions and coma, which, in suppression of urine, precede death, are met with in diseases which "pervert the qualities of the secretion. . . . That such derangements in the natural secretions and excretions should greatly influence the brain, ceases to be a matter of astonishment, when we find that the blood of those who have albuminous urine is often highly impregnated with urea, while it is deficient in its due proportion of albumen. . . ." "Effusion of blood or serum into the brain is one of the great causes of danger in renal disease."

Experience has confirmed him in taking a rather serious view of chronic albuminuria (p. 449). There are long remissions but frequent relapses. He speaks of the grave prognostic influence of functional or organic disease of the kidney as a complication of acute disease or severe injury. The urine should always be examined before contemplated operations; but one examination is not enough, for sometimes when the disease is advanced, "a simple serous secretion passes with scarcely any albumen; . . . and I early perceived that there was no direct ratio between the degree of disease and the quantity of albumen. . . . Perhaps, in some doubtful cases, an examination of the serum of the blood to ascertain its condition both as regards the presence of urea and the proportion of albumen might be useful."

In his Goulstonian lectures, after discussing the character of the normal urinary secretion, the variations of the specific gravity and the methods of testing for albumen, especially the use of heat

and nitric acid, he refers to the confusion which may be caused by the precipitation of phosphates by heat or of urates in testing with nitric acid. As renal disease goes on, the urine loses the properties which it derives from the presence of urea, while urea becomes demonstrable in the circulating blood. Whatever becomes of the urea in the blood, "it is plain that what appears to be the great office of the kidney—the depuration of the blood—does not take place." Anasarca itself does not always accompany albuminous urine, and it should be remembered that anasarca may occur without albuminous urine. He reviews the arguments which justify his assumption that renal disease is at the root of the clinical symptoms which he has described, and he refers again to the common complications of the disease.

In 1836 he gives a more or less complete summary of his work and tells the story of the disease in a clear and concise manner. He emphasises the frequency of the condition and discusses with almost legal caution those which he regards as its commoner causes—"scarlatina or some other acute disease"—intemperance, exposure to cold. In his description of the clinical symptoms, among which he notes the fullness and hardness of the pulse, and his discussions, anatomical, physiological and pathological, he has done about as much as one could do without the microscope and the ophthalmoscope.

Following this is a tabular review of the morbid affections in one hundred patients with albuminous urine in which he treats especially of the complications of renal disease. In the discussion of the cause of the common left ventricular hypertrophy, he asks whether it may be due "to an affection of the minute and capillary circulation so that greater action is necessary to force the blood through the distant subdivisions of the vascular system."

Four years later, he again protests against the assumption, by some writers, that he regards albuminuria as necessarily evidence of a progressive and fatal disease and relates a series of instances of acute, many of scarlatinal, nephritis. In 1842 Bright published a brief note on some microscopical studies with Toynbee, which led them to believe that the essential element in the disease was the glomerular change.

This ends the contributions that Bright made to the study of renal disease in his own name, although as we shall see, valuable studies were made later under his guidance and direction. In a little less than ten years he had brought into medicine a remarkably clear clinical and pathological conception of those forms of renal disease which since then have come to be associated with his name. Bright's contribution was not a mere recognition of the association of clinical symptoms with anatomical change; studies had been made not only of the urine but of the blood serum and body fluids, and he had been led into various speculations of a physiological nature. *He was one of the first to introduce methods of quantitative chemical study into routine medical practice.*

One may say, as has been said, that the world was ripe for his discoveries. Perhaps it was. The world is always ripe for men such as Bright.

OTHER CLINICAL STUDIES

But Bright did much more than discover the relation between albuminuria, dropsy and renal disease. In his first quarto he took up the study of dropsical effusion connected with disease of the liver, presenting with remarkable clearness and precision a series of cases of hepatic cirrhosis, of which he treats in his later observations on jaundice and on abdominal tumours. He records two cases of cardiac infarction with intraventricular thrombi, one associated with sudden death; their nature he does not recognise. He describes the chronic peritonitis occurring in ascites of long duration, which he believes to be due "to a slow inflammation kept up by the unnatural stimulus of the fluid."

He relates the histories of a series of cases of bronchitis with several necropsies; one wonders whether Laennec would not have regarded two of these as instances of emphysema. Sections are devoted to the termination of pneumonia in suppuration and gangrene, and to phthisis pulmonals; they are accompanied by beautiful illustrations. "Obstruction of the mesenteric glands by tuberculous disease" he regards as an important cause of emaciation, and he describes and pictures the caseous ("engorged") lacteals making their way to such glands.

There are admirable descriptions and plates of the intestinal lesions in typhoid fever, "changes never suspected to be as general until brought into view by the French physicians."

During the four years between the appearance of the first and second parts of the *Reports*, the greater part of Bright's time appears to have been given to his hospital studies and to his teaching. He played an active part in the regeneration of the Guy's Physical Society, of which he was President for the year 1829–30. The only other publications appear to have been the outlines of his lectures for 1827 and a brief report of an instance of unusually profuse sweating.

In the second quarto of his *Reports*, devoted to diseases of the brain and meninges, Bright records over three hundred cases, for the most part with necropsy and with comment which is often strikingly acute and discriminating.

He describes and pictures suppurative meningitis and abscesses of the brain secondary to diseases of the middle ear and of the accessory sinuses and to erysipelas. In his account of "acute hydrocephalus" he recognises its association with tuberculosis in brain, meninges, and elsewhere, but he concludes that "... it would seem that the Hydrocephalus is rather the result of the constitutional tendency than of the tubercles, though these morbid deposits are probably often the exciting cause." How close he came to that which Papavoine was recognising at the same moment, which Gerhard set forth so clearly two years later! He regards headaches as usually dependent on cerebral congestion.

He describes sclerosis of the medullary substance of the brain in an instance of familial spastic diplegia and of the cord, which was "remarkably firm throughout, almost like cartilage," in a case of pontine tumour, ascribing the spasticity to these changes. He mentions the frequency of venous thrombosis under the influence of debilitating causes. He calls attention to the "leaden gray colour" of the viscera, and later to the pigmentation ("colour of black lead") of the brain in patients who had evidently died of pernicious malaria.

He recounts many instances of Jacksonian epilepsy. But more than this *he recognises the significance of the syndrome* and describes it repeatedly with great clearness.

Among the many recorded instances of hæmorrhage, softening and pressure by growths, there are interesting and acute observations on cerebral localisation. Later, he reported two instances of tumours situated at or about the cerebellar pontine angle; one apparently cerebellar in origin. Of these he says: "There has been so great a resemblance in the symptoms, as to confirm the feeling which I always entertain and wish to enforce—that in disease, as in other matters, there is a fixed relation, which it is possible we may discover between cause and effect. . . ."

In connection with two instances of amnestic aphasia with central lesions, he observes: "When we review the cases which I have thus thrown together, I trust that, in one point, the connection between them will be obvious; inasmuch as they all serve, more or less, to establish and keep up our conviction, that the symptoms which arise in cerebral and spinal disease are actually the results and therefore the fair representatives, of the lesions which the different portions of the nervous system have suffered." Defects of speech he has observed are often associated with lesions of the posterior part of the corpus striatum. He recognises the frequent sclerosis of the arteries at the base of the brain and notes that the common seat of hæmorrhage "is undoubtedly a little to the outside of the corpus striatum in either hemisphere, just at that part where many large vessels may be traced coming from the trunks in the fossa sylvii and pervading the brain."

In connection with the formulation of bullæ in several cases of paraplegia, it occurs to him that "... this connection between interrupted nervous action and the formation of bullæ, might hereafter be found to throw light on the nature of that most singular disease herpes Zoster, which, from the peculiar pain with which it is associated, as well as its striking confinement to one side of the body, seems to be connected with some peculiar condition, perhaps the distention, of the sentient nerves."

In a necropsy on a negro he noted that the "skull was thick and heavy in a remarkable degree"—a racial characteristic familiar to those of us who live in the South.

He describes, I believe for the first time in literature, a characteristic instance of that which later was known as Addison's disease, with caseated adrenals.

In an instance of diabetes he notes the extreme scirrhous degeneration of the pancreas. He describes an obvious example of what later came to be known as "Adams-Stokes Syndrome" with slow pulse and sudden death.

Conservative in therapeutics, he makes an observation in connection with the treatment of chorea which, in a broader sense, might well be meditated upon by the profession of to-day: "I have occasionally known instances in which arsenic has been successfully administered, but I object to this remedy where others less hazardous will act as well."

The association of rheumatic fever, chorea and cardiac disease is discussed often and interestingly. In a later article he refers to pericarditis as an occasional cause of chorea.

Convulsive phenomena are discussed at some length.

The clinical account of tetanus is remarkable; that of hydrophobia is masterly. How striking is the following observation:—

"As regards the symptoms of the confirmed disease they bespeak the highest state of nervous irritability; and affecting, as they do, almost exclusively in the first instance, the functions of respiration and deglutition, and in some degree the circulation, they seem to be immediately dependent upon some morbid action excited in the nerves of organic life, or that particular set of nerves which has been so beautifully illustrated by Mr. Charles Bell as connected with the respiratory apparatus

—and looking to the large proportion of those who are bitten, yet who escape entirely from the disease, it might perhaps arise as a legitimate question whether it is not one of the conditions necessary to the production of the disease, that some nervous fibre immediately connected with that system should have been wounded."

The second quarto appeared but seven years after Bright had acquired the opportunities offered by wards of his own. The quiet, modest young man who had schooled himself from the beginning to observe, to note, to picture, to record all that which he could grasp of Nature and her works, had been true to his promise; in his medical inquiries he had shown the same keen, sure powers of observation, the same industry, the same mental poise, the same sound, sane judgment that he had manifested in his earliest writings. At the age of 42 he had seen and comprehended and recorded and illustrated his experiences in communications which stand out among the great contributions to medicine.

MEDICAL EDUCATION AND CLINICAL STUDY

In 1832, following the publication of his second quarto, Bright was promoted from Licentiate to the full Fellowship in the Royal College of Physicians. He had become distinguished among his colleagues and loved by his pupils.

The introduction to his course of lectures at Guy's, published in 1832 at the request of the students, contains passages which can be scarcely passed over. He insists on a "sound classical and mathematical foundation on which to build," on the study of the fundamental sciences as the "corner stone" of the "edifice," but he warns the student to remember that "the practice of medicine is the most important part of the medical practitioner's education," and urges the necessity of obtaining a "connected knowledge of those diseases which . . . will be the chief objects of his practice, the daily betrayers of his ignorance, or the touch stones of his skill."

In Bright's days also there were those who failed to comprehend until too late,that long-continued, often wearisome, daily experience in clinical observation is vital for the development of the true physician.

"We have all of us senses, it is true," but ". . . without much experience our senses remain most imperfect, compared with the exquisite perfection to which they are brought by practice. . . ." On the accuracy of his observation all the deductions of the physician must depend.

"By the eye you will learn much; many diseases have the most distinct physiognomy. The sunk and shrivelled features derived from the long-continued disease of the abdominal viscera; the white and bloated countenance often attendant on changes in functions or structure of the kidneys, the sallow and puffy cheeks, of the liver" (a surprising picture if taken literally!) "diseased from habitual intemperance, the squalid and mottled complexion of the cachexia dependent upon the united effects of the mercury and syphilis," (*sic*) "the pallid face of hæmorrhage, the waxen hue of amenorrhœa, the dingy whiteness of malignant disease, the vacant lassitude of fever, the purple cheek of pneumonia, the bright flush of phthisis, the contracted features and corrugated brow of tetanus. . . ." We can forgive the liver's "puffy cheeks" in one who could have written "the vacant lassitude of fever." He refers to the perfection to which the sense of touch is elevated in the blind and says: ". . . to a certain degree we may all acquire such accuracy of touch, and it is our duty to do it." The necessity of continued observation of common clinical phenomena is emphasised, especially regular and repeated visits to those suffering from acute disease.

In the same year Bright described, for the first time in medical literature, the passage of large quantities of neutral fat in the stools of individuals suffering from disease of the head of the pancreas and duodenum and, in his admirable discussions here and later, he is inclined to regard the phenomenon as due to "obstruction" in the pancreas.

Bright's father-in-law, William Babington, died in 1833, and the first Goulstonian lecture was preceded by a warm tribute to his friend and teacher. The qualities which he praises in his master are curiously like those which his friends discovered in him. In these lectures on the functions and diseases of the abdomen, lectures which are full of wise observation and comment, he refers briefly but very clearly to an instance of generalised scleroderma.

A little further on he describes the character and significance of peritoneal friction, and the "dough-like sensation" or "hard, knotty feel" in the abdomen, the seat of chronic, proliferative peritonitis, of which malady, two years later, he gives the first clear account. In the course of this article he throws out the suggestion that if, in serous effusions, some method could be devised of inciting inflammatory action short of producing grave adhesions, it might have a curative effect on the effusion.

In 1836, and again in 1839, Bright was a censor of the Royal College of Physicians. In the former year appeared the first volume of *Guy's Hospital Reports*. How active Bright was at this time is

indicated by the eight communications from his pen. The first of these, on the treatment of fever, begins with the words: "It is a duty incumbent upon the physician who has ventured at any time to lay before the profession his ideas of disease and its treatment, to review from time to time his published opinions that he may see how far subsequent experience has borne out, or modified, his former impressions; and if he detect any material alteration in his mode of viewing disease, more particularly as respects the practice he has found beneficial, it is right that he should take an opportunity to make it known." This statement gives the opportunity to an anonymous and atrabilious scribe for the assertion that "... Dr. Bright had for *many years* abandoned a practice which he had previously recommended for its excellence to the profession, without ever hinting to them until this very day, that that practice was materially calculated to keep up the disease which he originally designed it to lessen."

Whatever Bright's inward action to attacks of this sort may have been, he appears to have followed the wise advice of the Rev. Cotton Mather: "*Sile, et funestam dedisti Plaham.*"*

Beside the description of a case of tetanus and studies of cerebral and renal disease already referred to, there follows a well-described and little-known observation of diaphragmatic hernia and observation on jaundice in which acute yellow atrophy of the liver is described for the first time, and an interesting note on the manner of spread of cancer in the liver. In one note he comments on the frequency with which the swollen liver of passive congestion is evidence of an overlooked cardiac disease. At another point he refers to the frequency of rigors in cholelithiasis.

Bright had become one of the leaders of the profession. His observations on renal disease were the subject of active discussion the world over. In the following year he published the first of a series of articles on abdominal disease, especially tumours which, later, were collected into a volume and edited under the auspices of the New Sydenham Society by Barlow. These communications are a mine of valuable observation and sane and acute comment. His observations on hydatid cysts, especially those relating to the development of the daughter cysts, are quite original. His discussion of ovarian tumours, of diseases of the spleen, of the kidneys and of the liver are full of suggestive, interesting and original observations. He recognises the frequency of anæmia and the hæmorrhagic tendency in connection with disease of the spleen, and he describes clearly an instance of that which later became known as Hodgkin's disease. He emphasises the association of cirrhosis of the liver with alcoholic habits.

In 1837 he delivered the Lumleian lectures on disorders of the brain which, apparently, remained unpublished, and in the same year he was made Physician Extraordinary to the Queen.

SOME BATTS AND OWLS

In 1839 appeared the first volume of the *Elements of the Practice of Medicine* by Bright and his associate, Thomas Addison; the second volume was never published. Written as a book of reference for students, it is notable for the clearness and conciseness of its excellent clinical pictures and its accurate anatomical descriptions. The authors, for example, recognise that fæcal abscess "in the right iliac region arises in a large majority of instances from disease set up in the *appendix cæci.*" The description of this process, as Hale-White has pointed out, is far in advance of anything of its time; it can scarcely be excelled to-day.

But, excellent though the work was, "the *Batts* and the *Owls*" muttered and, to a leading journal of medicine, one of the former contributed a dismal and depreciatory review of the volume. The critic who airs his familiarity with, and betrays his incomprehension of, the French literature asserts solemnly that "these 'Elements' rank much, much below mediocrity." The review ends with an attack on the existing method of distributing hospital appointments. "So long as it exists, laziness will be the distinguishing characteristic of those who hold them." The rich who buy their positions will think of naught but striking bargains; the enthusiasm of the poor man "will be crushed, ere it can lead to action, and his spirit soured as he looks on the disgraceful inefficiency of

'... those baleful, unclean birds,
Those lazy owls, who (perched near Fortune's top)
Sit watchful with their heavy wings
To cuff down new-fledged virtues that would rise
To nobler heights, and make the grove harmonious!'"

This is indeed a sad picture!

And there were the "*Owls*" as well as the "*Batts.*" In 1839, one Richard Bright, of 25, Ely Street, Holborn, M.R.C.S., and "Author of a Popular Treatise on the Diseases of Females; entitled Every Woman's Book; or Female's Physician," published a small octavo volume on the treatment of dropsy. After a somewhat preposterous discussion of "dropsy" as a disease,

* Mather, Cotton, *Manuductio ad Ministerium.* Directions for a Candidate of the Ministry, etc., 8vo, Boston, printed for Thomas Hancock & Co., 1726, 142.

there follows a rather hazy description of the author's successful treatment of the malady and a series of illustrative cases. It is obviously the work of a member of the profession whose eye was fixed upon the main chance. At the conclusion the writer devotes a page to the defence of his medical standing and character, which have been attacked by evil-minded men. He has, it appears, attended lectures for nearly six years at Guy's, and acquired his physician's diploma in 1837. In proof of his good standing he adduces a series of carefully worded but pleasant testimonials from Sir Astley Cooper, Sir Benjamin Brodie, Addison, Gordon, Bransby Cooper, Robert Keate and Charles Aston Key. But the author appears to have suffered from doubts and premonitions; all his testimonials are dated 1837, two years before the publication of his book.

The "*Batts*" may annoy, but profit little by their feverish flutterings—the "*Owls*" are wiser. One may fancy that Richard of Holborn may have drawn from the public a fair measure of the balm that he sought. As he may have hoped, his great work has for nearly fifty years been ascribed, in one important medical bibliography at least, to another Richard Bright whose name does not appear in the book.

But the "*Batts*" and the "*Owls*" failed to disturb Bright, who seems to have gone on his way unperturbed, notwithstanding what old Mather called "the unregardable allatrations" of his adversaries.*

RETIREMENT FROM GUY'S

Bright had enjoyed the privilege of his position at Guy's for nearly twenty years. He had made the most of his opportunities and had observed keenly and recorded accurately and conscientiously that which he had observed. That "chastened power" of generalisation and the "cautious habit of reasoning upon facts," which he had urged upon his students, had enabled him greatly to enrich medical literature. In 1843 he was seriously ill, and, at the early age of 54, he retired from the hospital positions of which he had made such good use. But the last use that he made of his service at Guy's was notable. In the spring of 1842 he obtained the permission of the authorities to set aside for a period of six months two clinical wards of 42 beds in all, with an intermediate room for consultations and the recording of histories and an adjoining and communicating laboratory, for the intensive study of renal disease. Bright refers to the experiment as the first made in England "to turn the ample resources of an hospital to the investigation of a particular disease. . . ."

The results of these studies were published in the *Hospital Reports* for 1843 in the names of his chief associates, Barlow and Rees, with a short prefatory note by Bright. The communication, with detailed clinical histories, thorough and accurately recorded physical examinations, careful necropsies, chemical studies of the urine, blood and body fluids is a fitting climax to Bright's labours on renal disease, and marks in striking manner the progress which clinical medicine had made in his day. But what is yet more striking and quite characteristic is that these studies, planned, inspired and directed by Bright, should have been published in the name of his associates who had done the detailed work—that his name should have appeared only in the preface, in which he scrupulously mentions the names of Barlow's interns and Rees's laboratory assistant.

Bright's remaining years were given to his consulting practice, to travel and to his many artistic interests. His practice, which had been slow in coming, grew to be large, perhaps the largest in London. The honours that he deserved came to him. He was given the Monthyon Prize by the Académie des Sciences of Paris. The degree of D.C.L. was conferred on him by Oxford in 1853. As the years passed by he is said to have interrupted his work by long vacations. He was aware for many years before his death that he had a valvular disease of the heart, but he was not interested in his own ills and the one colleague who is known to have had an opportunity of placing his stethoscope over his sternum was not allowed another chance.

On the night of December 11th, 1858, Bright was seized with melæna, associated with great prostration, dyspnœa and anginoid pains. He failed to rally and four days later, just after midnight on December 14th, he died.

SOME LAST WORDS

One cannot look back on this life of unusual achievement without a sense of warm admiration for the man. Happy in his birth and in the surroundings and conditions of his early life, cultivated "by travel and society," an artist, a linguist, a man of scholarly tastes, Bright made full use of his opportunities. Modest, simple, high-minded, mellowed by the broadening and softening influences of the experience of a practising physician, Bright appears to have been in the true sense of

* Bright's equanimity appears to have been remarkable. One Holloway, an advertising quack, announced in print that Bright had recommended his treatment, and the *Lancet*, scandalised, demanded a denial. Bright ignored it all, telling his friends that the advertisement was beneath his notice. Bright was probably wise, for, at Holloway's elbow, stood none other than our old friend Richard of Holborn.

the word a gentleman, possessed of the μεγαλοψυχία of Aristotle, one who moved among men, high and low, with courtesy and sympathy and charity. His equanimity, the sober restraint of his language, his studied avoidance of intemperate or provocative words or acts, excite one's admiration. He seems to have had a rather unusually winning simplicity and purity of character to which his obituary notices bore touching testimony.

He was a great observer. He was not given to hasty speculation. His mind seemed never to wander from nor to anticipate the phenomena on which his attention was fixed. He examined that which was before him with an objectivity which amounted almost to genius. That which he observed he *saw*, he remembered, he appreciated—often he recorded. To him who knows how to observe, who has that which we call "insight," to him truth reveals much that she hides from the many.

A disinterested lover of truth, Bright appears to have been quite oblivious of questions of priority or of personal fame, going out of his way to give credit to his colleagues and to his associates for work done at his suggestion and under his direction. He lost nothing by his generosity. For generosity fame has a sharp and comprehending eye.

One may easily fancy that the reputation which he finally gained as a consultant was justified.

We have gone a long way since the days of Bright. The great advances in the natural sciences and their increasing application to the problems of medicine have revealed to us many secrets of physiology and pathology, and have immensely broadened our knowledge of the causes and nature of disease and of the means by which it may be avoided, recognised, arrested or healed. A new and scientific therapy based on a broader conception of the functions of the human body, and on the application of sound biological, physical and chemical principles, is full of promise for the future. The simple basic methods of physical diagnosis of the day of Laennec and Bright have been greatly augmented. The little clinical laboratory, the child of his fertile mind—with what wonder and delight would Bright have contemplated its offspring to-day!

Science has contributed much to medicine. But, after all, how far we are from the day when medicine may be practised by rule of thumb! Science has added greatly to our knowledge of pathology, to the art of diagnosis and of therapy. New and fascinating opportunities for research tempt the student at every turn. The increase of our knowledge and of our technical skill has brought it about that men may devote a whole career to the practice of specialties of surprisingly limited boundaries, specialties which have given rise to a terminology bordering sometimes on the ludicrous. The other day I heard a good fellow solemnly descanting on "the science of sinuology"—the "science," if you will, of the accessory sinuses of the nose! The problems and procedures which a physician must consider to-day when consulted by a patient are far more complicated than they were in Bright's time. But all this new and precious technique supplements, it does not supplant, the fundamental procedures of observation and physical examination of which Laennec and Bright made use. And we must not forget that a thorough training in the fundamental art of physical exploration is as vital as ever, that the necessary period of experience spent at the bedside of the patient has not been shortened by a day. Familiarity with the symptoms of disease, an ability to recognise and interpret these symptoms—which may be obtained only by experience—are among the first requisites for him who would be a competent physician. No amount of learning can supply this familiarity, this ability. The intelligent interpretation of symptoms is the first step. He who has not seen the development and progress of disease, he who has not followed the affected subject to his recovery or to his death, he who has not seen his diagnosis confirmed again and again after death, will never attain this familiarity; he will be unfit to practise, much less to teach the art of medicine. The art of diagnosis may not be required by the contemplation of radiograms, by the perusal of reports of studies of tissues, body fluids, secreta and excreta, or by the critical consideration of data accumulated by others. As Sergent has well said, one sense may not be substituted for another. The senses are complementary; he who neglects one at the expense of another narrows his horizon.

Laennec and Bright worked with simple tools. Medicine would be poor had we to-day no more. But they worked passing well. They laid foundations on which much has been built; the foundations that they laid were sound.

Between the histories of these two men the contrasts are great. In one respect their lives were similar. Each had a good general and classical education; both were men of wide interests. This is generally true of the greatest figures in medicine. Bright showed early an instinctive interest in the works of Nature, in geology, in botany, in zoology. His was the eye of the naturalist. To most men—indeed, to every man with scholarly tastes—life would be unendurable did it not hold for him some engrossing task to accomplish which he is striving in the midst of the routine of existence, some problem he seeks to solve, some investigation he is endeavouring to carry out. With many a man

life slips by and, in the end, it may seem to have been a vain effort but, after all, it was that effort, that hope, that carried him on, that brought out the best that was in him.

Without this spirit of inquiry no one can go far. Spurred by it, the superior man may find the school of practice less alluring perhaps at the outset than the opportunity to devote himself uninterruptedly to the study of some concrete scientific problem, but he will find it no less broadening and no less repaying in the end and quite as full to-day, as it was in the days of Laennec and Bright, of opportunities for enduring contributions to science and to humanity.

This spirit Bright carried with him throughout his career. He could not have been called a brilliant man. He made at first no great impression on those about him. But brilliancy is often ephemeral; very often brilliancy spells instability. Bright showed a steadfastness of purpose and an equanimity that are rarer and more precious than mere brilliancy. He was a simple, straightforward, kindly man, who met life with charity and tolerance and serenity; a conscientious, painstaking physician; a patient, careful, modest, scrupulous, time-taking observer. He became a wise and a learned man and the fruits of his labours assure him a well-merited and honourable immortality.

Bright was buried in Kensal Green. There is a tablet dedicated to his memory in St. James's Church in Piccadilly. The inscription ends with these words:

"HE CONTRIBUTED TO MEDICAL SCIENCE MANY DISCOVERIES AND WORKS OF GREAT VALUE AND DIED WHILE IN THE FULL PRACTICE OF HIS PROFESSION AFTER A LIFE OF WARM AFFECTION, UNSULLIED PURITY AND GREAT USEFULNESS."

The Rotunda Hospital, Dublin.

A Month's Visit 44 Years Ago.

THE interesting article," The Rotunda Hospital, Dublin: A Brief Account of a Month's Visit," by Mr. Graham C. Campbell, in your journal of June 18th appeals to me, as I had a similar instructive and pleasant experience 44 years ago, the Rotunda then, as now, having a great reputation.

A fellow student and I, having attended at the Middlesex Hospital a course of Midwifery Lectures, entered our names for a month's practical midwifery at the Rotunda for August, 1883, and in due course presented ourselves to the Master.

He informed us that, the students' quarters within the hospital being full, we must sleep outside; consequently, we took bedrooms—not without difficulty, as many were none too clean—in Rutland Square.

I have before me as I write a photograph taken at the time of the Staff and some of the students who happened to be nearby.

Their names are Drs. Macan (Master), Lane and Henry (Assistant Masters), McCulloch and another (Clinical Assistants), and Messrs. Perez, Dudfield, Jacomb-Hood, Laurie, Stiles, Dow, Moseley, Frith, Holroyd, Davenport, Hollman, Horsley, Donovan, Downes, Horton, Purdon, Browne and Maggs. The Labour Ward, as far as I recollect, was fairly large, with several windows, and the walls of rough stone, whitewashed.

There were no "series of wires stretching from one wall to another and from which curtains hang," as Mr. Campbell mentions in his paper. Screens, when necessary, were put around the bed.

I was informed that should a case become septic this ward was closed, disinfected and whitewashed.

Dr. Macan, rightly called the Master (of the specialty he practised) began at 9 o'clock, I think, his morning round in this ward, going first to the patient last confined.

He took her pulse and temperature, looked at her tongue, and asked if she were in pain, following this up by pressure with his hand over the region of the uterus. He went through a similar procedure with each patient. All having gone well, the mother and child left the hospital on the eighth day following the confinement, the baby having meanwhile been vaccinated.

An outside bell, calling students to the ward, was rung as soon as a labour case had begun.

Each student was appointed for one day's duty in the week, the number for each day varying with the number of internal students, and the cases were taken in regular order—Hobson's choice.

I may mention that the internal students' hours were from 8 a.m. to 8 p.m., and for external students, men from the general hospitals in Dublin, from 8 p.m. to 8 a.m.

Before making an examination, students were required to tuck up their sleeves to the elbow and scrub their hands and arms with soap and nail-brush for five minutes or longer.

The antiseptics in common use were carbolic acid and perchloride of mercury. The student in charge of a case in the Labour Ward controlled it completely, the Staff, students and nurses looking on. He urged the patient to bear down when

the pains occurred, and he supported the perinæum. Accouchements were carried out in a quiet matter-of-fact manner and without any fuss, due no doubt to the frequency of their occurrence. Extern cases were invariably attended by two students, who called in a member of the staff when in difficulties.

The clinical assistants, who had entered for a six months' course, with a view to taking the L.M. of the Rotunda, keen on work, were very helpful to the Master and his assistants in instructing students. One of them, Dr. McCulloch, remained my friend until his death a few years ago. I neglected the gynæcological department because I wanted to learn midwifery, also major gynæcological operations were rare in the early 'eighties.

The students' catering was done by the steward under the supervision of a senior student, and the cost of the excellent and abundant food, divided amongst the students, averaged about 30*s.* a week per head.

I was greatly impressed, as was Mr. Campbell, by the poverty of the extern patients, little in the way of furniture or ware being in their bedrooms, and no comforts.

In one instance the laths of the bedstead had broken and the whole of the bedding had fallen on the floor, the framework of the bedstead remaining.

Great respect—almost amounting to reverence—was shown by patients to the doctors; in fact, it fell little short of that shown towards their priests, and many blessings were bestowed on my head.

In conclusion, I would add that the easy and practical methods of teaching by the staff made learning a pleasure instead of a task.

W. A. MAGGS.

Sport.

Golf.

OWING to the kindness and trouble taken by Mr. Bromley, a second match "Staff *v.* Students" has been arranged, and will take place on Wednesday, July 6th, at Sudbrook Park. Play commences at 2 p.m.

Unfortunately, the match arranged with Dulwich for Thursday, June 15th, was cratched by them. It is hoped, however, to arrange another day later on in the season.

On Wednesday, June 22nd, we were entertained by the Shortlands Golf Club. This was our first match of the season, which although ending disastrously for the Hospital, was thorougly enjoyed by everyone.

Results

Guy's		*Shortlands*	
L. W. Cann	6/4	J. W. Cattermole	0
K. Whitworth	½	C. E. Spencer	½
G. G. Cameron	0	E. M. Earle	2 up
E. S. Phillips	2/1	A. Woolley	0
J. A. Jackson	0	R. Haste	6/5
J. A. Vernon	0	G. Fitzsimmons	3/2
O. Ive	0	E. M. Lane	2/1
A. T. D. Gibbings	0	R. C. Barrett	2/1
E. B. Langmead	1 up	H. A. Moir	0
E. C. Duffett	0	G. R. Wilson	4/3
S. H. Croot	0	C. Sage	2 up
G. T. Hankey	4/3	F. S. Gauntlett	0
H. J. Croot	½	L. C. Smith	½
	5		8

On Wednesday, June 8th, at West Kent, Chislehurst, play took place for prizes kindly presented by our President, Dr. Cameron. Although many members turned up, the long grass was too much for most of them, but practically everyone struggled bravely in the foursomes. The results were as follows:—

18 *Hole Scratch*

J. A. Kernon, 86.
O. Ive, 89.
H. J. Croot, 98.

18 *Hole Handicap*

J. A. Vernon	86—12=74
O. Ive	89—12=77
H. J. Croot	98—18=80

Foursomes

O. Ive & H. J. Croot	93—11=82
W. J. Cotton & C. F. Brockington	89— 6=83
G. G. Cameron & J. A. Jackson	90— 6=84
E. C. Duffett & J. B. Schofield	99—12=87
J. A. Vernon & S. L. A. Clarke	99—10=89
J. L. Glover & H. Girling	103—10=93

There will be no Competition on the first Wednesday in July. On Wednesday, July 13th, it is hoped to be able to arrange a society match with a Bogey Competition, to be played off concurrently.

There is a list, posted on the Boards in the Colonnade, for the Society Match. Will all those who would like to play please add their names to this list. Should sufficient numbers be willing to play, foursomes and singles will be played.

E. C. DUFFETT,
Hon. Sec.

ON Wednesday, July 6th, we spent a most enjoyable time at Sudbrook Park, Richmond, in combat with the Staff. We should like to express our appreciation and thanks to the captain and committee of Sudbrook Park for allowing us to play there and to Mr. Bromley, who took so much trouble in arranging the many details which resulted in such an enjoyable match.

The students gained a rather surprising victory, winning the singles by 6 matches to 4 and the foursomes by 3 matches to 1 match.

It is impossible to give an account of individual matches, but they were all very keenly contested, and everyone enjoyed playing on a course in such excellent condition.

We understand the bunkers had an almost uncanny attraction for many, some appearing loath to leave them.

Results

Mr. Bromley (5/4)	1	K. Whitworth	0
Dr. Cameron	½	J. L. Glover	½
Mr. Cann (7 & 6)	1	G. G. Cameron	0
„ Morgan	½	J. A. Jackson	½
„ Knott (7 & 6)	1	O. Ive	0
„ Phillips	0	E. J. Pye-Smith (1up)	1
„ Chappel	0	E. C. Duffett (3/2)	1
„ Hughes	0	H. J. Croot (3 & 1)	1
Dr. Ryffel	0	G. T. Hankey (1 up)	1
W. G. Grove	0	S. L. A. Clarke (7 & 5)	1
	6		6
Mr. Bromley and Mr. Cann	0	K. Whitworth and J. L. Glover (2 up)	1
Mr. Knott and Mr. Phillips (3 & 1)	1	E. J. Pye-Smith and O. Ive	0
Dr. Ruffel and Mr. Hughes	0	H. J. Croot and G. T. Hankey (1 up)	1
Mr. Chapple and W. G. Grove	0	E. C. Duffett and S. L. A. Clarke (3 & 1)	1
	1		3

E. C. DUFFETT,
Hon. Sec.

Tennis.

American Tournament.

ON Wednesday, June 22nd, a very enjoyable afternoon was spent at Honor Oak Park, when a Tennis Tournament, organised in aid of the Hospital, took place. Through the kindness of the Matron and the untiring energies of Sister Johnson some 20 members of the Nursing Staff were enabled to take part in the Tournament. The players were divided into three sections. Section A was won by Miss Kidd and Knight, who scored 29 games, Miss Barrett and Hollis being next with 28 games. Section B was won by Miss Baker and Neely by 27 games to Miss Weiss and Pitt-Payne's 25 games. Section C was won by Miss Bristow and Housden by 35 games to 33 games scored by Miss Major-Lucas and Ettles.

In the semi-final Miss Baker and Neely beat Miss Bristow and Housden by 7–5, after a close match, the feature of which was the powerful driving of Neely.

In the final Miss Kidd and Knight beat Miss Baker and Neely 6–3, 7–5.

The Matron then presented the prizes. We were all very pleased that she was able to come down to watch the play, and our thanks are due to the Matron and Sister Johnson for such a pleasant afternoon.

As a result of the Tournament the funds of the Hospital were augmented by the sum of £3 13*s.* 6*d.*

G. M. HOUSDEN, *Hon. Sec.*

Swimming Club.

Guy's v. Monson S. C.

THIS return match, played at Pitfield Street on Friday, May 27th, vindicated our opinion that our loss to them early in the season was merely due to an "off day," and not due to a real weakness in the team. Not only did the team win the polo 8–3, but also did they win each event, and won them easily.

L. Brown played his best game of the season, and proved that after all "long shots" are effective goal getters. Evidently the advice offered on the subject has been well digested.

Guy's Team—R. N. C. Smith; C. E. M. de Gruchy, T. L. Kark; L. Brown; O. M. H. Jones, J. W. H. Jones (capt.), C. D. Malone.

Guy's v. Oxford University.

THIS match, played at Merton Street Baths, Oxford, on Wednesday, May 25th, resulted in a win for the Hospital by 5–4. We were unfortunate in being without our goalkeeper, and Croot acted as substitute. It was obvious that he was new to the position, and it cost 3 goals before he grasped the idea. At half time the score was 3–1 against us, Malone having scored our only goal by an individual effort. Soon afterwards, in a scramble in front of the Oxford goal, the combined efforts of Theis and Malone succeeded in washing the ball into the goal. A long shot from L. Brown drew us level, only for Brodie to score again for Oxford. de Gruchy again levelled the score and Malone added one more, to give us the match. It is not too much to say that with a full team we should have won more easily.

The results of the swimming were as follows :—

45 *Yards*—

1st, B. Brodie (O.U.) ; 2nd, C. E. M. de Gruchy (time 23⅕ secs.) ; 3rd, W. A. Smith (O.U.), and D. P. King.

440 *Yards*—

1st, C. D. Malone ; 2nd, R. R. Brooks ; 3rd, J. W. H. Jones. Time, 6 mins. 33⅖ secs.

90 *Yards*—

1st, W. W. Butterworth ; 2nd, C. D. Malone ; 3rd, W. Wren. Time, 55 secs.

Polo—

Guy's Team—J. Croot ; C. E. M. de Gruchy, C. D. Malone ; L. Brown ; S. E. Theis, J. W. H. Jones, O. M. H. Jones.

Oxford's Team—E. C. Harlowe ; M. Miller, D. J. Phipps ; K. de J. Hofmeyr ; F. S. Oram, W. L. Brown, F. C. Harris.

Guy's v. Cambridge University.

PLAYED at the Leys School Baths, Cambridge, on June 1st. For a team that one of the sporting dailies has described as " the best water polo team that has played for any of the London Hospitals," the Guy's team has been very erratic. Here, again, at Cambridge, barring one or two individual and spasmodic efforts, the play was not up to standard nor anywhere near it. Wilson played a brilliant game for Cambridge to score 5 goals on his own, and we must find consolation in the fact that the score indicates that it was very much a one-man game. Malone played well, he and O. M. H. Jones being the steadiest players for the team or that afternoon. Jones has developed splendid control of the ball, and only requires more speed to become a really good player. Malone, by some desperate efforts and good play, managed to score 2 goals, and O. M. H. Jones flicked the ball in once. That completed our scoring for the afternoon and ended the game, Guy's losing 3–8.

The results of the swimming were as follows :—

220 *Yards*—

1st, K. G. Wilson (C.U.) ; 2nd, W. M. Bassett (C.U.) ; 3rd, C. D. Malone ; 4th, T. L. Kark. Time, 2 mins. 50⅘ secs.

100 *Yards*—

1st, C. D. Malone ; 2nd, H. B. Johnson (C.U.) ; 3rd, E. P. Bilbrough ; 4th, J. W. H. Jones. Time. 65⅘ secs.

50 *Yards*—

1st, D. C. Tanner (C.U.) ; 2nd, N. B. Frazer (C.U.) ; 3rd, C. E. M. de Gruchy ; 4th, D. P. King. Time, 28⅘ secs.

Relay Race—

Cambridge won by 5 yards.

Polo—

Guy's Team—R. W. Stephenson ; C. E. M. de Gruchy, C. A. Wakeford ; L. Brown ; C. D. Malone, J. W. H. Jones, O. M. H. Jones.

Cambridge's Team—I. Custerson ; H. E. Cannings, J. W. Mallinson ; H. B. Johnson ; T. D. Wallace, K. G. Wilson, G. C. Gibbs.

Rowing.

The Inter-Hospital Races.

THESE were rowed over the usual course at Putney on Wednesday, May 18th. We were hoping to see an eight from St. Mary's in the Senior Race, but they had to scratch owing to illness. We also had our share of ill luck, and Clayton-Jones had to retire at the commencement of practice. In fact, our prospects in the Senior race looked anything but good until Keele and Ride came into the boat. The former rowed at " 7 " and the latter at " 6 " ; much of our success was due to them.

The Bart.'s eight looked very promising during practice. They were neat and well together and, with a Cambridge Junior " Trial Cap " at stroke, appeared to be redoutable opponents. Nevertheless, our own crew set to work with much enthusiasm, and having Mr. Hylton Cleaver to coach us—once again we owe him a debt of gratitude—made very good progress in the short time one has before a Hospital race.

Clifton, after four years' honourable service in the eight was unfortunately—owing to Hospital duties—unable to row.

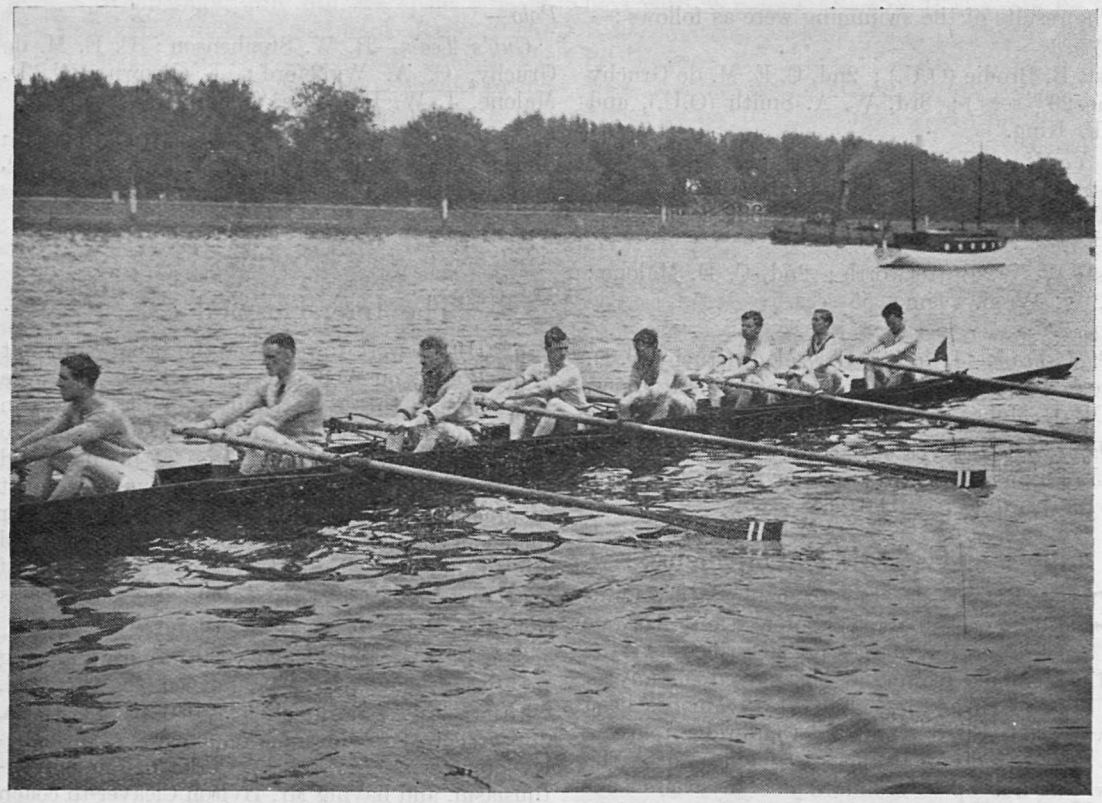
Many members of the staff were present on the launches, and Mrs. Davies-Colley very kindly presented the Cups at the London Rowing Club after the races.

SENIOR RACE

St. Bart.'s won the toss and chose the Surrey side. We got in 36 strokes in the first minute to Bart.'s 33. The latter were surprisingly slow off the mark, and we got a length off them in the first minute. At Beverley Brook the Guy's eight was 1½ lengths ahead, and was holding this advantage quite easily. Bart.'s never seemed to get their boat moving really well, and although they tried a spurt opposite the " Crabtree " we held our lead with little difficulty and went away to win by 3 lengths.

The result was a little surprising, but the crew certainly rowed at the top of their form.

The course was from the University Stone to Hammersmith Bridge.



Crew

		st.	*lbs.*
Bow	W. S. Stephenson	10	4
2	C. G. Townsend	11	0
3	G. G. Ellis	11	3
4	J. H. Richmond	13	11
5	W. H. Miller	12	4
6	L. T. Ride	12	0
7	K. S. Keele	12	4
Stroke	E. C. Huddy	11	4
Cox	W. S. Grove	9	4

JUNIOR RACE

This was rowed in "Clinker" fours over a course from the University Stone to the "Mile Post."

We were unfortunate in being unable to obtain our light boat until only three days before the race, which was a great handicap to our crew, who were rather inexperienced. Nevertheless, they rowed very well in a race where conditions were against them, and showed promise for future years. Moreover, the Bart.'s crew were not really "Juniors" so far as this particular event is concerned.

Guy's won the toss and elected to row on the Surrey side. Our four had some difficulty in getting away at the start, and although they stuck to their opponents with much determination, Bart.'s went away to win easily.

Crew

Bow	J. H. Wheatley.
2	W. H. Wheatley.
3	— Dingemans.
Stroke	— Biden-Steele.
Cox	P. V. Reading.

Rifle Association.

Annual Prize Meeting.

THE Rifle Clubs' Annual Prize Meeting was held on June 15th at Bisley. In addition to the regular members, the presence of several novices contributed to the success of the Meeting. It is to be hoped that the latter will support the Club next year in order that we can find the necessary good shots to replace the members of the Hospital team who may be leaving the Hospital this year.

The prizes were presented by our President, Dr. Herbert French, to whom we owe a deep debt of gratitude, and we regret that he was unable to be present at the actual distribution of the prizes at the conclusion of the Meeting.

The shooting was of a high standard, taking into consideration the weather conditions. H. Richards started off very well with a 33 out of a possible 35 at 200 yards, gaining a lead of 3 points. At 500 yards he was still leading with a 66, E. St. John being second with a 63. At 600 yards Richards finished with a 30, making his aggregate 96—an excellent result. E. C. Gross scored a 33 at 600 yards, which brought him into second place with 92.

The following were the prize winners :—

Newton Pitt Cup—
H. Richards

200 *Yards*
1st H. Richards 33
2nd E. St. John 30

500 *Yards*
1st E. St. John 33
2nd R. L. Duchesne 31

600 *Yards*
1st E. C. Gross 33
2nd C. L. Stevens 32

Open Aggregate
1st H. Richards 96
2nd E. C. Gross 92
3rd C. L. Stevens 91

Handicap
1st E. C. Gross 97
2nd H. Richards 97
3rd A. H. Amsden 96

Novices
1st A. H. Amsden 80
2nd T. D. T. Brocklehurst 78

Rapid
1st E. St. John 25
2nd R. L. Duchesne 24

United Hospitals' Rifle Club.

ON June 18th the United Hospitals' Rifle Club won the County of London Astor Cup, beating the South London Rifle Club on the count-out on the long range. The victory was rather marvellous when the constitution of the South London team is considered. First, there was Mr. A. Fulton, the King's Prize winner on two occasions. Next, Mr. Eccles, who only the week before scored a possible at all three ranges under King's First Stage conditions. Then there were Messrs. W. E. Curnock, G. H. Fox and A. P. Prout, all first-class shots, and, finally, Miss M. E. Foster, the finest lady shot in the country.

United Hospitals' Rifle Club

	200 Yds.	500 Yds.	Total
M. J. Harker (capt.), Bart.'s	34	33	67
C. L. Stevens, Guy's	31	34	65
F. H. Morrell, Bart.'s	31	34	65
R. L. Duchesne, Guy's	32	32	64
H. Richards, Guy's	29	33	62
J. Elgood, Bart.'s	30	32	62
	187	198	385

South London Rifle Club

	200 Yds.	500 Yds.	Total
W. E. Curnock	33	34	67
G. H. Fox	34	33	67
A. G. Fulton	34	32	66
A. Eccles	29	34	63
A. P. Prout	31	31	62
Miss M. E. Foster	29	31	60
	190	195	385

Post Office Savings' Bank Rifle Club

200 Yds.	500 Yds.	Total
185	192	377

Armitage Cup.

THE United Hospitals' Prize Meeting on June 22nd coincided with the last round of the shoot for the Inter Hospitals' (Armitage) Cup. This Cup is shot for by a team of six, and the aggregate of four weeks' shooting under King's Prize First Stage conditions is counted. Four hospitals shot in the Competition, but it was apparent quite early that either Bart.'s or Guy's would win. Bart.'s secured a lead of 15 points on the first shoot, and increased this by 1 on the second ; on the third week we drew level, and the final round saw us victorious by 5 points. Bart.'s were unfortunate in that two of their best shots were prevented by examinations from shooting on several days. But for this they would probably have won. However, when it is remembered that their team consisted almost entirely of experienced shots, whilst only one of ours had previously represented the Hospital, the side is to be congratulated on a very creditable performance.

Final scores (possible 2,520 points) :—

Guy's	2,191 points
Bart.'s	2,186 ,,
London	2,076 ,,
St. Mary's	1,875 ,,

This was St. Mary's first appearance at Bisley for some years, and they made a most sporting effort under very difficult conditions.

Team scores :—

	Guy's June	1st	8th	15th	22nd	Total
C. L. Stevens	96	92	91	98	377	
H. Richards	86	95	96	92	369	

T. Wren	89	91	88	98	366
R. L. Duchesne	91	93	87	94	365
H. E. Harding	90	94	91	89	364
E. C. Gross	85	84	—	85	259
E. St. John	—	—	91	—	91
	537	554	544	556	2,191

Bart.'s

	June 1*st*	8*th*	15*th*	22*nd*	*Total*
F. T. J. Hobday	95	99	88	95	377
W. A. Elliston	94	93	91	95	373
A. F. Wallace	90	92	84	90	356
F. H. Morrell	92	88	81	91	352
A. W. L. Row	86	—	86	91	263
T. H. Whitehurst	—	—	98	89	187
M. K. Harker	95	89	—	—	184
H. J. Burrows	—	94	—	—	94
	552	555	528	551	2,186

There were five Guy's men in the first ten best individual averages.

In the United Hospitals' Prize Meeting we managed to secure a large proportion of the prizes. T. Wren, who joined us only a week or two before the Competition, was successful in winning the grand aggregate prize with a score of 98 out of 105. C. L. Stevens, who also scored 98, was counted out, taking second place.

Results :—

Donegal Badge
C. L. Stevens (Guy's)

200 *Yards*
1st C. W. Simpson (London)
2nd F. T. J. Hobday (Bart.'s)
3rd C. L. Stevens (Guy's)

300 *Yards*
1st C. L. Stevens (Guy's)
2nd R. Lay (Guy's)
3rd H. Richards (Guy's)

500 *Yards*
1st T. Whitehurst (Bart.'s)
2nd R. L. Duchesne (Guy's)
3rd A. F. Wallace (Bart.'s)

600 *Yards*
1st T. C. Wren (Guy's)
2nd C. L. Stevens (Guy's)
3rd C. W. Simpson (London)

Snap
1st J. Elgood (Bart.'s)
2nd — Howells (London)
3rd T. Noble (London)

Rapid
1st J. Elgood (Bart.'s)
2nd W. D. Broughton (London)
3rd E. St. John (Guy's)

Aggregate
1st T. C. Wren (Guy's)
2nd C. L. Stevens (Guy's)
3rd W. A. Elliston (Bart.'s)
4th F. T. J. Hobday (Bart.'s)

A Staff *v.* Students match was shot on the same day. Unfortunately, the Staff were not able to get a full team down, and hardly any of them had had any practice. Despite an allowance of 50 per cent. dropped points, the Staff team were therefore defeated by 20 odd points. Mr. Ogilvie shot remarkably well in scoring 89, and the President was robbed of a bull by the misguided efforts of the team coach. The Staff team consisted of Dr. French, Mr. Ogilvie, Mr. Baird, Mr. Gough and Mr. Harding. A very pleasant afternoon in the sun—which must be repeated next year.

The immediate future of the Hospital shooting is quite bright, since all but Duchesne should be available for some time, but there is a need for new members to come and practice sedulously—at the miniature ranges during the winter months and at Bisley from April to June. The season has now finished except for the Inter-Hospital Cup given by the N.R.A., which will be shot for on July 12th.

Hospital Information, etc.

Pass List.

Society of Apothecaries of London.
June, 1927
Surgery
T. C. Lansdale
Medicine
T. C. Lansdale
Forensic Medicine
S. Slotar

Appointment.

Dr. Louis Lavine, appointed Honorary Physician to the Royal Infirmary, Hull.

Marriage.

SHAW—BECK—On July 1st, 1927, at St. Mary Abbott's, Kensington, by the Rev. Harold Woolley, V.C., Maurice Elgie, only surviving son of the late Dr. Lauriston Shaw, to Christine, only daughter of Mr. and Mrs. Conrad Beck, of 34, Upper Addison Gardens, W.

SPURRELL—GRIFFITH—On July 1st, 1927, at Southwark Cathedral, by the Rev. W. G. Spurrell, Vicar of Carew, uncle of the bridegroom, Walter Roworth, second son of Mr. and Mrs. Walter Spurrell of Carmarthen, to Dorothy Gwynne, second daughter of the Rev. G. W. Griffith, late Vicar of West Knoyle, Wilts.

Eds. { P.F.S. C.
G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *July 30th, 1927.* *Number 1018*

PASSIM

IT has been well said that we live in an age earmarked by change. We have only to look back a few years to remember the quaint buff-coloured buildings of Regent Street, now almost entirely replaced by the vaster white buildings of modern architecture. The hospital of to-day is greatly changed from that of twenty years ago—improvements are constantly taking place, old departments are rebuilt and new departments constructed to suit the requirements of the present age.

Thinking thus we often wonder what Guy's Hospital of some twenty years hence will be like. Shall we still be our own hospital, ruled by our own Governors or shall we be a part of a National Medical Unit?

At the meeting of the British Medical Association, held recently at Edinburgh, we noticed that the future of the hospitals of this country was discussed, especially with regard to their future relationships to the Poor Law Infirmaries. Reform of administration of the latter was urged with considerable enthusiasm, and it was suggested that the reform productive of the greatest benefit to the sick would be that obtained by the handing over of the control of these Infirmaries to the local Municipal Authority.

Further, the ideal would be reached when the voluntary hospital and the municipal hospital were under some joint management, both in respect of the provision of their medical staffs and the engagement and training of their nurses. In this suggestion we forsee the possibility of an era of State control in the Medical profession, a time when the general practitioner will become a paid servant of the State, and the practitioner of to-day will be merely a memory of the past.

Whether this would result in the ultimate benefit of the health of the community as a whole is at the moment a matter merely of conjecture, but it would seem that some stringent supervision of the health of the nation is necessary, especially with regard to the teaching of the lay public the fundamental principles of good health.

The creation of such a hospital service for the whole country would most likely have a great deprecating effect upon those sources from which the voluntary hospitals at the present time obtain their charity. Some scheme could, however, be planned whereby the cost of the hospital service would fall more heavily upon those who had the ability to pay than upon those who had not got such resources. We feel that in this country the community should be quite able to support an efficient hospital service and that by making those, who were financially able to do so, morally and legally responsible for the upkeep of such a system of hospital service, the present financial standing of many of the hospitals of this country would be put upon a surer and stronger foundation.

▭

WE offer our congratulations to the Cricket Team, who regained the Inter-Hospital Cup, which was lost last year, and also to the Tennis Team on retaining the Senior Inter-Hospital Cup. The cricket eleven defeated St. Bartholomew's Hospital in the final match by six wickets, while the tennis team defeated St. Thomas's Hospital by eight matches to six. We hope in a later number to publish full accounts of both of these successes.

Angina Pectoris and Allied Seizures.

Clinical Lecture. By J. A. RYLE, M.D.

GENTLEMEN,—In 1768 William Heberden gave to the Royal College of Physicians in London an account of a disorder which has since been known to the world as angina pectoris. This account he published later in a small but precious volume entitled *Commentaries on the History and Cure of Diseases*. His description of the condition is so remarkable, alike for its accurate clinical observation and for its conciseness and perfection of phrase, that it remains unsurpassed to this day. By way of introduction to my lecture I must content myself with quoting from it certain descriptive passages, but I would commend the whole of it to your reading.

After referring to other forms of pain in the chest, he proceeds: "But there is a disorder of the breast marked with strong and peculiar symptoms, considerable for the kind of danger belonging to it, and not extremely rare, which deserves to be mentioned more at length. The seat of it, and the sense of strangling, and anxiety with which it is attended, may make it not improperly be called angina pectoris. They who are afflicted with it are seized while they are walking—more especially if it be up hill and soon after eating—with a painful and most disagreeable sensation in the breast, which seems as if it would extinguish life, if it were to increase or to continue; but the moment they stand still all this uneasiness vanishes." He next discusses the exact situation of the pain, its reference down the arm, and the age and sex incidence, and notes that the pulse may remain unaltered throughout an attack. With cogent reasons he supports his view that "angina pectoris . . . belongs to the class of spasmodic, not of inflammatory, complaints." He discusses treatment with admirable sense. "The termination of the angina pectoris," he says, "is remarkable. For if no accident intervene, but the disease go on to its height, the patients all suddenly fall down, and perish almost immediately. Of which indeed their frequent faintnesses and sensations as if all the powers of life were failing, afford no obscure intimation."

Now in discussing angina pectoris it is not my intention to-day to enter minutely into questions of ætiology nad pathology, or of the pathogenesis of the symptoms—in regard to which there remains much to be discovered—but rather briefly to review:—

(1) The clinical features of the disorder;
(2) Its clinical varieties; and
(3) Other clinical conditions which bear a close resemblance to it.

In regard to ætiology and pathology, let it suffice to say that in its graver forms it occurs mostly at or after the age of 50, and is much more common in men than women; that it is frequently—but not invariably—associated with changes in the arteries, and particularly—though not necessarily—with atheroma of the first part of the aorta and the coronary vessels; that in younger subjects it may be associated with syphilitic aortitis; and that "nervous" and "toxic" varieties, without demonstrable organic disease, are also encountered.

The fact that it has so many and such varied associations at once suggests the impropriety of regarding angina pectoris as a disease. It is not a disease, but a syndrome (or group of symptoms), and yet such a dramatic syndrome that it assumes the importance of a disease in our minds. Now the main symptom is indubitably the pain, and it is a pain of such a peculiar kind and often of such severity that it merits special study. In my teaching in the wards I am, as you know, repeatedly insistent on the diagnostic value of pain, and from time to time I have suggested to you that it is worth while having some system of analysing particular pains, especially in the case of visceral disorders unaccompanied by objective signs. There are no less than ten reasonable questions which may be asked in respect of such pains. Of these two have reference to their quality and may be answered under the headings of *character* and *severity*. Three have reference to their location and distribution in space and may be answered under the headings of *situation, extent of diffusion* and *paths of reference*. Three have reference to their distribution in time, and may be answered under the headings of *duration, frequency* and *particular times of occurrence*. Two have reference to determining causes and may be answered under the headings of *aggravating* and *relieving* factors. And over and above all these our interrogatory must, of course, include *associated symptoms*.

Let us apply these questions in the case of angina pectoris. Of its *character* in bad cases we might almost say that it defies description, but it is generally recorded as a crushing, bursting,

constricting or vice-like pain. Its *severity* varies from a mere sense of discomfort or oppression —sometimes it is mistaken for flatulence—to the extremest agony that man is called upon to suffer. Of its *situation* we may say that it is generally retrosternal, but it may be as high as the manubrium, as low as the ensiform, or even epigastric. Sometimes it is situated to the left and lies within the præcordial zone. Its *localisation* is fairly confined and accurate, and may be indicated with a closed fist held against the sternum, but its possible *paths of reference* are numerous and wide. Most common and characteristic is the reference down the inner side of the left arm to the elbow, or as far as the ring and little fingers of the left hand; but it may also pass into the right arm, up the side of the neck, or into the jaw, The *duration* of an anginal paroxysm induced, as it usually is, by some physical effort, is a matter of minutes rather than seconds or hours, but it is common for the attacks to become more prolonged with the passage of time. The *frequency* of the paroxysms is very variable. A man may die in his first attack, or survive it for many years with freedom from pain. Generally speaking, they tend to become more frequent and to arrive for lesser causes. Of *particular times of occurrence* Heberden is careful to mention the early hours of the morning after the first sleep, when other "spasmodic complaints" are liable to assert themselves. Of *determining causes,* physical efforts (especially "on a full stomach") anger, anxiety, and cold are the most noteworthy. All of these tend to produce a transient rise in the systemic blood pressure. Peace of body and mind, warmth, and, in the attacks, absolute immobility and amyl nitrite are the main relieving factors. Of *associated symptoms* the "angor animi" is the most remarkable, but does not by any means appear in every case. It is sometimes referred to as "the fear of impending death." More correctly it is an actual "sense of dying," and sometimes more awful in its effect upon the patient's mind than his physical sufferings. A sense of restricted breathing (but without dyspnœa); tingling and numbness (instead of pain) in the arms; and polyuria after the attack may also be mentioned. Between attacks the patient at first feels well and may appear to be in robust health. Should heart failure supervene the attacks may altogether disappear. Summarising the features of the anginal seizure in a single brief definition we may say that it is "a substernal pain of cardio-vascular origin, paroxysmal in character, commonly of great severity, most constantly induced by effort and relieved by rest, and sometimes associated with a peculiar sense of dying."

I would next ask your consideration of the clinical varieties of angina pectoris, and in this I may perhaps best help you by selections from my case-notes, so arranged as to give you pictures first of the more innocent, then of the less innocent, and, finally, of the gravest forms. At this point I would also ask you to decide whether we should continue to employ or finally reject the term "pseudo-angina." I would plead for its rejection, or for its retention only as an instrument for reassuring an anxious patient afflicted with what we believe to be an innocent angina. It may be true that the more innocent forms are commoner in women and occur at an earlier age, but if the symptoms have a genuine relationship to those included in our definition they are surely "anginal." When a patient has hunger-pain from excessive smoking or worry we do not say that he has pseudo-hunger-pain because he lacks a duodenal ulcer. Surely it were better to speak of benign and malign angina rather than of false and true angina, for, from a practical point of view, what we have to decide in each individual case is "Is this a form of the disease about which I can give a reassuring prognosis, or is it one which will sooner or later cause the patient's death?"

Before discussing even the most innocent clinical variety of anginal seizure let us ask ourselves—and it is a useful question to ask of any subjective symptom—whether there is anything in health closely or remotely akin to it. I think there is.

Confronted one day at my Out-Patients by an elderly man with a history of severe anginal attacks, I asked him to give us as clear an account as he could of what the symptoms were like. His reply was: "Well, sir, you know as a young man what it felt like when you tried to run a race untrained —the awful, tight, bursting feeling in your chest. It is like that, but a hundred times worse."

That was a good observation and you will note that it was the tight, bursting sensation and not the dyspnœa to which he referred. The anginal distress, or something akin to it, can be evoked by a supernormal effort in a healthy person; in an unhealthy person it may be evoked, and with magnified intensity, by a normal effort.

I was consulted for a transient dry pleurisy by a healthy-looking young woman aged 30. After describing her present symptoms she mentioned quite casually that for as long as she could remember, whenever she went out for a walk on a cold day she had had a pain in the chest which radiated down the left arm. In every other way she was perfectly well, and she led an active life. There were no signs of cardiovascular disease. There was clearly no anxiety about her case, and yet her vaso-motor responses to cold combined with effort

were adequate for the production of minor anginal pain with a typical reference.

There was another woman, something under 40, who came on account of several attacks within a period of six months characterised by a very severe pain behind the sternum, radiating down the left arm to the little finger which remained numb when the attacks had passed. She also had a feeling as though she were going to die. The attacks generally came on when she was tired. She was "run down" and unfit, had suffered a great emotional stress, and was working too hard. She had had some minor rheumatic symptoms, but there were no signs of organic disease of the heart or arteries and her blood gave a negative Wassermann test. With rest and reassurance she steadily improved. I regarded hers as a case of benign angina dependent on vaso-motor disturbances and not on structural cardiovascular disease.

It was less easy, although I elected to do so, to give a reassuring verdict in the case of a woman aged 52 who complained of a pain behind the lower sternum induced by walking up hills, or against the wind, or by sudden cold, or by stooping. The pain was always relieved when she stood still. It frequently radiated to the left wrist. In every other respect she felt perfectly well. The important additional piece of evidence was that *she had had the symptom for seventeen years*. It developed at a time of great mental anxiety when a domestic disruption had necessitated her taking upon herself physical and mental burdens and responsibilities beyond what should be expected of any woman. To make prognosis still more difficult in her case she had a blood pressure of 150 systolic, 90 diastolic and possibly slight hypertrophy of the left ventricle. What were the chances of her benign angina becoming malign with the development of organic arterial changes as her age advanced?

In the next case, more typical of Heberden's description, the prognosis was clearly bad. A man of magnificent physique, aged 67, complained of a gripping pain behind the lower sternum on mounting hills or stooping and after food. It had also caught him on getting into bed—probably through the contact of the cold sheets—and had occasionally wakened him at 2 a.m. It passed down both arms to the elbows. In a minor form he had been occasionally aware of it for five years. His blood pressure was 205 systolic, 110 diastolic, and his urine showed a trace of albumen. The attacks were becoming more severe and frequent. For him one felt death was surely waiting round the corner.

The severity of the pain is of little or no prognostic import. An old clergyman who had led a healthy and active life complained of a "bursting" feeling behind the sternum, always induced by walking, and associated with tingling in the left arm. There was no agony and no angor animi. His radial artery was slightly thickened; his blood pressure was 180 systolic, 110 diastolic; his apex beat was in the nipple line; he had frequent extrasystoles. He was ordered rest and a prolonged holiday from his work. I saw him again a few months later. His signs were as before. He reported himself as distinctly better. I ventured to display a little optimism, but did not sanction a resumption of duties. Two days later he was sitting still reading a book when he fell back dead. The presence of any physical signs of organic cardiac change in association with angina calls for a guarded verdict.

Of the "allied seizures," the first to be discussed is the condition commonly called "status anginosus," in which the sternal or præcordial pain continues with great intensity or is repeated again and again at short intervals; in which nitrites fail to bring relief; and even heavy doses of morphine may be only partially successful. This terrible condition is now shown to be caused in almost every case by coronary thrombosis with local ischæmia of the heart muscle. With it there may be slight fever for a few days and a transient leucocytosis. The pain is sometimes referred to the epigastrium, and, with the associated grey pallor and collapse, may be so strikingly suggestive of a perforated ulcer as to lead to operation. Within a few hours or days symptoms of heart failure may supervene with congestive signs; the blood-pressure falls; the heart sounds may become distant and faint; occasionally a pericardial rub is heard. The patient may die within minutes, hours or days of the first onset, or he may recover with a crippled, or a healed and apparently healthy heart. Some patients are able to return to their normal occupations. An electrocardiogram usually reveals evidence of the myocardial damage.

What else may we include within the category of "allied seizures"? There is "abdominal angina," of which some of you may recently have seen a case under my care in Addison Ward.

An ex-sailor of 50, with syphilitic aortitis and aortic regurgitation, complained of "terrific" pain felt just below the navel, coming always as the result of efforts, and usually of very slight efforts such as getting out of bed or even turning over in bed. There was tenderness along the course of the abdominal aorta, but no sign of aneurysm. Angina abdominis is much rarer than angina pectoris. It sometimes leads to a suspicion of disease in the alimentary tract and even to operations. Last week I performed a post-mortem examination, which some of you will have wit-

nessed, on a woman who had died after an attack of what might well be called "status anginosus abdominis." She had been admitted collapsed and in great pain, and was explored as a case of possible perforated viscus. The abdominal aorta showed advanced syphilitic disease and the cœliac axis and right renal artery were plugged with recent thrombus.

Angina may also occur in the leg, and I, personally, prefer the title of "angina cruris" to "intermittent claudication," which is the term usually employed to describe a severe type of pain affecting the leg in patients with arterial disease. This pain is typically induced by walking and relieved by standing still. Occasionally, however, the pains, like the pains of angina pectoris, may develop even at rest, and I have notes of a case of angina cruris in an out-patient who was seized with violent pain in one leg while sitting at his fireside. He was carried to bed and passed a night of physical and mental anguish. With evident awe he described a feeling during the attack "as though his number was up." With complete arterial occlusion there may ultimately ensue a "status anginosus cruris," with more persistent pain and gangrene of the toes or foot.

Thus we have, as clinical parallels to angina pectoris, abdominis and cruris—all transient phenomena and similarly evoked—those graver states, with symptoms of ischæmic damage superadded to the pain, to which I have ventured to refer as "status anginosus" of the same parts. Viewing together, instead of separately, these forms of painful seizure accompanying functional and structural vascular disease and probing them for a common factor, do we not, perhaps, find ourselves more nearly in possession of an answer to the old vexed question of the seat and cause of the pain in angina pectoris?

The Total Eclipse of the Sun June 29th, 1927.

By R. L. WATERFIELD.

THE total eclipse is over, and, according to the Press, the "story" of it is "dead." That, indeed, may be so, but upon the memories of those who were fortunate enough to see it the eclipse of June 29th has imprinted a "picture" that no lapse of time can ever obliterate.

It was my first total eclipse, and I had been somewhat doubtful of my enthusiasm in my eulogies of its beauty to my friends. So often has one "cracked up" as a spectacle some coming astronomical event—so often has one learnt afterwards with what coldness by the layman it was witnessed! But, on June 29th, nobody who saw it was disappointed. At Giggleswick over 60,000 people were held spell-bound for half a minute, and the gasp of amazement and wonder—mingled with a little (unmistakeably) of fear—that arose from their mouths spoke of an appreciation that far outstripped the most extravagant of their expectations.

I arrived at Giggleswick on the Friday before the eclipse. And there came also the same day the Astronomer Royal (who was there unofficially and not, as some imagined, officially in charge of the Greenwich expedition), and Dr. Steavenson—an old Guy's man—who is President of the British Astronomical Association. On our arrival it was pelting with rain, and the five members of the official party from Greenwich Observatory, who had already been there 10 days, told us that since their arrival they had scarcely seen the sun.

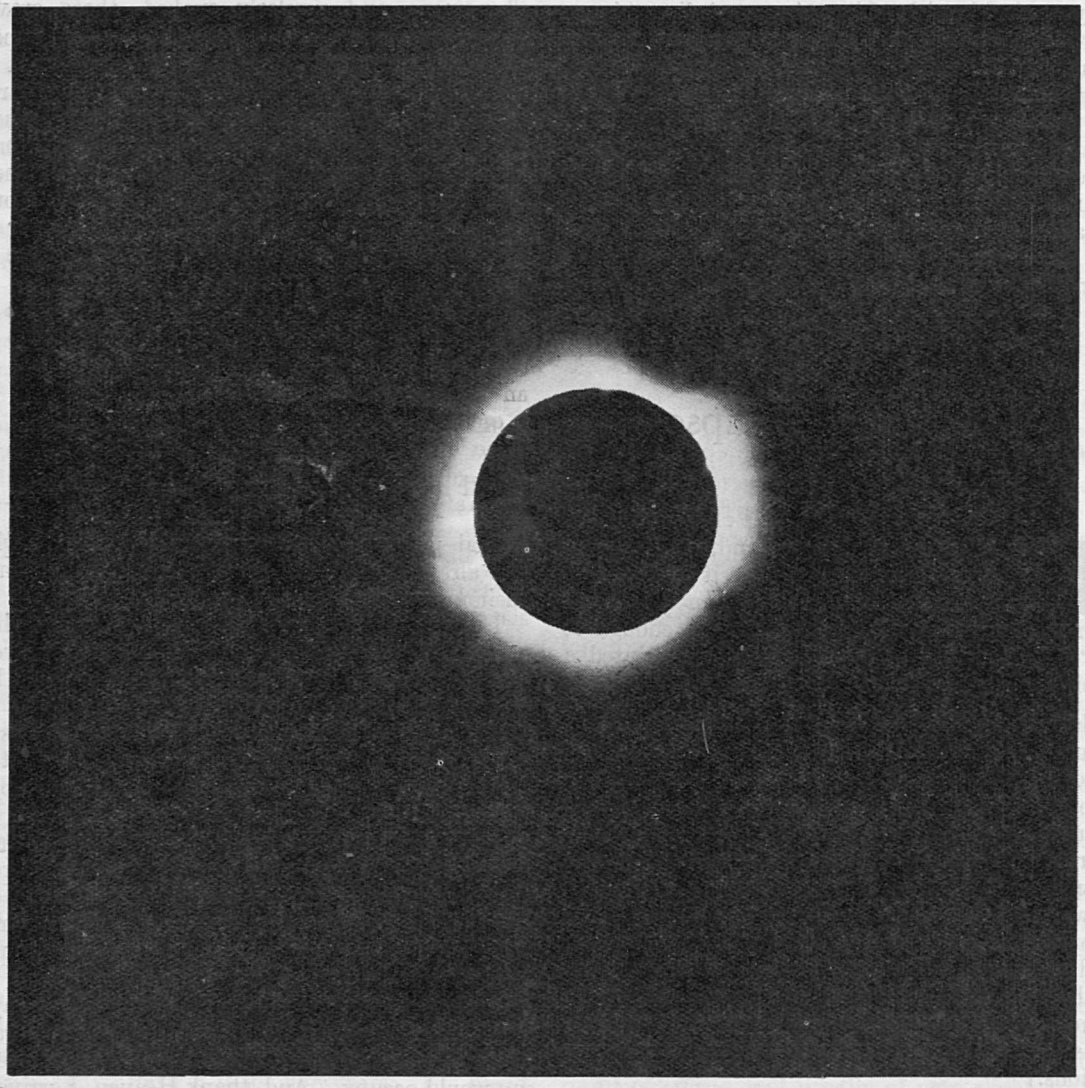
The weather problem, in fact, was rapidly becoming critical, for it was a question whether, even if it was fine for the eclipse itself, there would be sufficient hours of sunshine before the event to make the final instrumental adjustments. Likewise, for my own purpose, it was essential that I should have some fine weather before the eclipse in order that I might arrange for the image of the sun during the 23 seconds of totality to fall automatically *upon* my plates. For my three direct cameras either one fine starlight night or one fine sunrise would be sufficient. But for my spectroscopic camera only a fine sunrise would fulfil the purpose.

As luck would have it that first night, Friday, it cleared about 3 a.m., and I got the three cameras directed upon the place which the totally eclipsed sun would occupy. And, thank Heaven, I arrived the day I did arrive, for on no subsequent occasion did there appear one single star that would have been of the least use to me!

But, alas, as for a sunrise, I never saw one, and that despite the fact that I actually succeeded—with the aid of two of the most powerful alarm clocks in that part of the country—in waking myself each morning at that ungodly hour.

The type of spectroscopic camera I was using had to be pointed, not directly at the sun, but at a certain precise distance, and in a certain direction, from the sun. And the only way of doing this was to allow the solar spectrum to fall actually upon the focussing screen and to shift the camera until each Fraunhöfer line lay upon the part of the screen which by previous experiment had been focussed for it. This clearly necessitated a view of the sun at 6.24 a.m. on at least one morning before the eclipse; and that view, unfortunately, I never got.

The next day, Saturday, it rained as it had never rained before. A dreary sight indeed was this camp of ours, and a glorious prospect for a total eclipse! The camp was in a field of long, windswept, rain-soaked grass, standing well above our knees. On the north side we were sheltered by the rocky eminence on which stood the domed chapel of Giggleswick School. To the east we looked straight across the valley to the line of hills above which would hang the conjoined sun and moon. And to the south lay the whole length of the valley stretching before us, and up which we hoped to see the approaching shadow of the moon. Finally, above us, along the western skyline, was an undulating line of hills ready to receive the crowds that were to come.



Copyright reserved.

The camp itself was surrounded by a high stone wall, completed in places by ropes and stakes.

Scattered about within this enclosure were tents and mackintosh-covered instruments. Here was the Greenwich 45 feet camera; a stupendous square tube carried horizontally on trestles and directed on the point of the sunset. One end carried a huge plate-holder; the other end was hidden in a small tent, which was removable—though seldom removed—during the sunshine intervals. Within this tent was the object-glass end of the camera, and the great flat, clock-driven mirror that directed the sun into it.

There, in two other tents, were the larger and the smaller of the Greenwich spectrographs, each with two mirrors—a flat, silver-on-glass, clock-driven mirror to " capture " the sun and to " hold it still " in the sky, and a parabolic metal mirror which, receiving the sunlight from the first mirror, formed the image of the sun upon the slit of the spectroscope. They were specially interesting, these two *metal* mirrors, for both had been fashioned over 100 years ago by the hand of the great Sir William Herschel. Yet the polish and excellence of their surfaces would have made envious the most modern of opticians.

Two other tents belonging to the Greenwich party served the purpose of dark room and work-shop. Yet another tent—but little more than a tarpaulin held upon stakes—formed the dark-room of Dr. Steavenson and myself, whose instruments, —photographic and visual telescopes and spectro-scopes—made two rather insignificant-looking, little groups in comparison with the cumbersome equipment of the Greenwich Observatory.

On Saturday afternoon there came over from the Oxford expedition at Southport Professor Turner and Dr. Knox-Shaw; they came to give away the prizes for the Giggleswick Speech Day, and they came laughing at our weather—for half an hour that morning with the sun had enabled them to make all in readiness with their instru-ments.

This news of fair weather at Southport was not a little distressing to us. Already most of us had been cursing the decision which had brought us to this Giggleswick among the hills, and now even some suggested that at this eleventh hour those who *could*, so to speak, take up their instruments and walk, should transport them bodily to South-port. But, though we murmured considerably, none of us moved.

On Sunday, about the middle of the day, we had a little of the sun, and on Monday we saw still more of it. On Tuesday the sun was actually seen about 8 a.m.—the earliest hour at which it had been seen for over a fortnight. By this time the barometer had been rising a little, and with it also our hopes, but by lunch time that day both again began to fall, and the clouds gathered ever more thickly in the sky. Towards evening cars were arriving in great numbers, and the journey from Settle to Giggleswick became ever more difficult.

At 11 o'clock that night most of the astronomers went to bed, and they did so without any hopes for the morning. But those who were to take photographs had to stay up that night to complete their preparations. Two of the Greenwich party were busy with their spectroscopes, comparison sparks and plates, and attempted to sleep at intervals in their dark-room. Dr. Steavenson and his two assistants and myself occupied ourselves in various ways, and in the intervals between our labours retired to the car, which had been parked within the field and there, with the aid of beer, coffee and sandwiches, we tried to break somewhat the now rapidly approaching destruction of all our hopes.

At 1 o'clock—midnight—we loaded our plate-holders with our specially sensitised plates. When we emerged from the dark-room, three-quarters of an hour later, the stars were shining brightly, yet a quarter of an hour afterwards the clouds had come up thicker than ever. It was about then that we noticed a low undercurrent of sound, the integrated murmur of innumerable distant voices —a sound so foreign to the country, so constant of London even in its quietest hour. As the time passed the noise grew louder, and now and again there rose out it and took form the beating of a drum, the music of a guitar or the notes of a song, and in the valley and upon the hills there flashed out periodically the light of a lantern. Presently the police arrived in great numbers, and those of them who came into the enclosure were disappointed that we had no beards.

As the daylight came into the sky we saw that the hills behind us, from the north-west to the south-west, were lined with crowds of people—lines upon lines of black moving figures. About 3.30 we had breakfast at the school tuck shop, and a little later the astronomers who had slept arrived upon the scene.

By this time the sun was well risen, but still we had seen no sign of it. In the great roof of cloud above us only one thin crack of light hung over the eastern hills. Our hopes—if they existed at all—were at their lowest. There was, however, one in the camp who was of a different mind. Robert Peel, our very ancient night watchman, had been bitten by midges on his nose—and the midges had been occupied in this way the whole of that night. Now, it was apparently a " say-ing " that whenever this particular relation stood between *his* nose and *these* midges then most

assuredly the dawn in Giggleswick would be fine. And all through that hopeless, murky dawn he stuck to his prophecy, undaunted by our lack of faith!

A little before 4.30 the eclipse began behind the clouds. Twenty minutes later we had our first view of the sun as it sailed out, half covered by the moon, into that little crack above the east. Simultaneously, a cheer arose from the crowds and somebody clapped, but already the sun had gone again, having made, as we thought, its final bow.

And then a curious thing happened. The clouds directly overhead began to melt away and the sky cleared downwards from above to the horizon. Only along the eastern hills a high wall of cloud remained covering the sun. Very slowly this cloud bank was sinking, still more slowly the sun was rising; would the one rise above the other before totality began? That race was exciting.

Suddenly, loud and clear above the din of people, the call "Five minutes!" rang out from the Greenwich timekeeper. Again "Four minutes!" came across the field, and almost at once the narrowest crescent of the sun floated up over the cloud bank. The murmurs and cries of satisfaction that followed were rather lost on me; only now could I start the adjustments of my spectroscopic camera. They were completely "out"; what exactly happened I do not know. All I remember is that none of the screws and wedges worked as they were meant to—everything went wrong. They told me afterwards I was a little careless with my language. And when I had finished I heard the man shout "Fifteen seconds!" to go.

Then the tragedy occurred—the focussing screen was torn out, the plate-holder was jammed in and the dark plate cover was removed. But I had forgotten the shutter behind the lens—it was wide open! The plate, bathed specially the night before, was wasted; the camera, made for this one occasion, and whose adjustments had occupied several weeks, was useless. And as I fumbled with the beastly thing I heard the counter shouting "Seven!" "Six!" "Five!" "Four!" while the light, during those four seconds, sank suddenly—and went out on the word "Three!"

It was an extraordinary sensation. To me, in those last seconds, all objects appeared to recede violently from me, and I was left alone in a dead but curiously livid looking world. A gasp of astonishment, amazement and fear broke from the crowd, and for 23 seconds there was watched in that place the most impressive spectacle that a British crowd had ever witnessed.

I myself saw only the last two seconds—and what I saw made me wish I had left all those wretched cameras in London. Then a brilliant point of light flashed up on the moon's right edge, several people shouted "Thank God!" and we ourselves went off to develop our plates and to have breakfast.

The eclipse had been a roaring success—and a gigantic fluke. Three-and-a-half minutes after totality another cloud covered the sun from view. The Atronomer Royal was congratulated by everyone—they declared that he had stage-managed the whole phenomenon beautifully.

R. L. W.

The Cat.

NOW I play tennis. So does Cochet. Cochet is what I call a tennis player, but I don't think that is what he would call me.

However, the thing is this. I have been to Wimbledon and I have watched Cochet. I have watched everything he does—forehands, backhands, everything. I do them, too, just like Cochet.

When hitting a forehand my left shoulder points towards the net—so does Cochet's. The weight of my body is on my right foot—so is Cochet's, on his. As I bring my right arm forward as if sweeping a cat off a wall I transfer the weight of my body, 14 stone, to my left foot what time I carry through. That is what I do, I see to that. Cochet does it, too, but I don't think he knows all about that cat.

Cochet keeps his eye on the ball. I keep both mine on it because sweeping the cat the right way is the secret of success.

I've got quite a nice racket—our cat is the only one that doesn't like it. It's got the fashionable lightblue gut and the handle is beautifully decorated with a lattice work of adhesive strapping.

What's more, I've got temperament. I bite. I learnt that from our cat. I don't just shake my head—if I lose I bite hard. I bite the ground, myself, my partner and the umpire, in that order. But I am learning self control. I am going to stop biting the ground and myself, and only bite my partner once and the umpire twice. Perhaps I've got too much temperament.

The only thing I haven't got, as far as I can see, is the right court. Cochet has the centre court. I haven't had it so far. I am convinced I will not be a tennis player until I have played there. So is Cochet.

But I think the explanation of it all is that our cat that I practise on is a semi-Persian pseudo-Manx cat—it wasn't a pseudo-Manx until I started tennis, but it is now—and it doesn't really try.

I am now waiting for kittens—they are much more sporting.

W. A. M.

Hospital Appointments.

THE following appointments and reappointments have been made by the Treasurer upon the recommendation of the School Council, subject to confirmation by the Court of Committees :—

Tuberculosis Officer—
Dr. Geoffrey Marshall, reappointment for one year.

Medical Assistants—
Mr. A. A. Osman, L.R.C.P., M.R.C.S., reappointment for one year.
Mr. J. W. Shackle, L.R.C.P., M.R.C.S., appointment for two years.

Chief Clinical Assistant and Registrar, Ophthalmological Department—
Mr. S. C. R. Flaxman, M.B., B.S., reappointment for one year.
Mr. O. Halstead, L.M.S.S.A., reappointment for one year.

Chief Clinical Assistant and Registrar, Dermatological Dept.—
Mr. G. C. Millis, M.B., B.Ch., reappointment for one year.

Chief Clinical Assistant and Registrar, Orthopædic Dept., with Charge of Workshops—
Mr. G. Lambrinudi, F.R.C.S., reappointment for one year.

Chief Clinical Assistant and Registrar, Neurological Dept.—
Mr. R. N. Ironside, M.B., B.Ch., M.R.C.P., appointment for two years.

Chief Clinical Assistant and Registrar, Children's Dept.—
Mr. A. A. Osman, L.R.C.P., M.R.C.S., reappointment for one year.

Chief Clinical Assistant, Actinotherapeutic Dept.—
Mr. J. F. Carter Braine, F.R.C.S., reappointment for one year.

Junior Assistant Bacteriologist—
Mr. A. Signaiewsky, L.R.C.P., M.R.C.S., appointment for two years.

Resident Medical Officer, Bright Ward—
Mr. D. W. C. Northfield, L.R.C.P., M.R.C.S., appointment for one year.

Assistant Anœsthetist to the Haspital—
Mr. R. C. Brock, L.R.C.P., M.R.C.S., appointment for two years.
Mr. O. Halstead, L.M.S.S.A., reappointment for one year.
Mr. J. W. Shackle, L.R.C.P., M.R.C.S., appointment for two years.

Anœsthetist to Bright Ward—
Mr. E. A. Scott, L.R.C.P., M.R.C.S., reappointment for one year.

Instructor of Patients with Defective Speech—
Mr. H. St. John Rumsey, M.A., reappointment for one year.

Director of V.D. Dept.—
Mr. V. E. Lloyd, M.B., B.S., reappointment for one year.

Assistant (Female) Director of V.D. Dept.—
Miss M. Rawlins, M.B., B.S., reappointment for one year.

Male Medical Officer in V.D. Dept.—
Dr. G. B. Dowling, M.D., reappointment for one year.
Mr. R. R. Macintosh, L.R.C.P., M.R.C.S., reappointment for one year.

Female Medical Officers to V.D. Dept.—
Miss V. I. Russell, M.D., reappointment for one year.
Miss E. H. Schwab, M.D., reappointment for one year.

Hœmatologist to the Hospital—
Mr. F. A. Knott, M.B., B.S., appointment for two years.

Dental Officer to Salomons Centre—
Mr. E. R. Bailey, L.D.S., reappointment for one year.

Dental Anœsthetist to Salomons Centre—
Mr. A. D, Marston, L.D.S., reappointment for one year.

July 13th, 1927.

Change of Address.

G. W. Heckles, M.B., B.S., 7, Ashley Road, Epsom, Surrey. 'Phone—Epsom 290.

H. D. Shore, 44, Queen Anne Street, W.1. 'Phone—Langham 2316.

J. Rhys-Herbert, from 8, Glenbrook Road, West Hampstead, N.W.6, to "Bryn" Whitchurch Gardens, Edgware, Middlesex.

W. Grant Oliver, 54, Piccadilly, W.1. 'Phone: Gerrard 8210.

Dr. H. Nunan Collier, 42, Gordon Square, W.C.1. 'Phone: Museum 7470.

A. W. Francis, 5, Clifton Place, West Hill Drive, Mansfield.

Dr. M. E. Shaw, 38, Addison Avenue, W.11. 'Phone: Park 9474; and 28, Devonshire Place, W.1. 'Phone: Mayfair 3647.

Mr. A. Ralph Thompson from 45, Queen Anne Street, W.1., to 143, Harley Street, W.1. 'Phones: Hop 4740 and Gerrard 3703, until further notice.

Correspondence.

E. H. Starling Memorial Fund.

DEAR SIR,—The School Council has decided to establish an "E. H. Starling Memorial Fund," and contributions will be gladly received by Professor Pembrey or myself. The Memorial will take the form of an extension of the Physiological Departmental Library, which was founded by Starling himself. A special book plate will be designed, and the fund will be utilised for the purchase of books and monographs for the Library.

Starling was one of the greatest—if not the greatest—of Guy's men of recent years, and it is hoped that the Memorial will be worthy of him.

I am, Yours faithfully,

T. B. JOHNSTON, *Dean.*

Medical School, Guy's Hospital,
London Bridge, S.E.1.
July 15th, 1927.

U. H. Swimming Club Gala.

DEAR SIR,—May I point out that the announcement, made at the United Hospitals' Swimming Club Gala concerning de Gruchy's performance in the 50 Yards, was erroneous, and that, unfortunately, it was published in your last issue. de Gruchy was $\frac{1}{5}$ of a second outside the record, made by T. R. Stevens (St. Thomas's) last year. The only record broken was that of the 200 Yards, C. D. Malone establishing the time of 2 mins. $36\frac{2}{5}$ secs.

I remain, Yours sincerely,

THEO. L. KARK,
Hon. Sec., G.H.S.C.

Guy's Hospital,
London, S.E.1.
July 19th, 1927.

Reviews.

Urinary Surgery. W. K. IRWIN, M.D., F.R.C.S.E.

THIS handy book is a small text-book on the subject without pretence to great detail. For the most part it presents itself as a discussion of the main urinary symptoms. It is interesting reading and contains much useful information. It would be well worth reading before doing G.U. dresser. It is not illustrated, and does not go into pathological detail. So for examination it is not sufficient.

With minor points—such as local anæsthesia for passing bougies—we are not in agreement, but on the whole practical information is deep and sound.

Recent Advances in Hæmatology. By A. PINEY, M.D. Published by J. & A. Churchill, London. *Price* 12*s.* 6*d.*

WE welcome the appearance of this book, for which there is a very real need, the English writers being greatly behind the times. While it was impossible, in the available space, to expect a work of great comprehensiveness like that of Naegeli, we have quite frankly to confess ourselves disappointed. To begin with, we had not been prepared to find the book severely limited to cytology, and were aghast to find a recent advance of admitted value like the Van den Bergh reaction dismissed with a wholly inadequate description, giving no account of its meaning or the diseases in which it is of value, as "outside our province." We had hoped that the writer would follow in the footsteps of other contributors to this series and devote adequate attention to the practical aspects of the subject, and we cannot but think that a great deal too much attention has been paid to pure—and often highly debatable—theory. New names for diseases which already possess adequate ones do not constitute an advance in hæmatology. It is a pity, too, that the writer has given such undue prominence to his own theories, especially on the reticula-endothelial system, thereby conveying the wholly erroneous impression that they have attained sufficiently wide acceptance as to constitute a recent advance. We could cite, among works eminently worthy of prominence in this book, the oxidase reaction—quite unjustifiably dismissed without a description of technique or bibliography as of little value—the Laidlaw modification of Wright's coagulometer, the valuable work of Price-Jones, which shed so much light upon the megalocytic anæmias, and recent work of Ledingham and Bedson on platelets.

In spite, however, of the fact that we part company with the writer on many points—not least of all in his method of making blood films—it is only fair to say that the book is well worth reading and possesses a good bibliography. The coloured illustrations, executed we believe by the writer's own hand, are among the best we have ever seen. It is good to see that the German writers no longer have the monopoly in this respect.

A Textbook of Psychiatry. By D. K. HENDERSON, M.D., and R. D. GILLESPIE, M.D. Published by the Oxford University Press (Milford). *Price* 18*s*.

SOME years ago, just before he entered the wards, the reviewer happened upon a little book then just published entitled *The Psychology of Insanity*, by Dr. Bernard Hart. He found in it ideas—expressed with the utmost clearness—concerning the interpretation of mental disorders which made him look forward eagerly to that phase of his medical curriculum which should lead him further into the field of which he had obtained so promising a glimpse. It was with a lively sense of pleasure therefore that in the second year of his clinical work he began to read one of the leading text books of the day upon this subject. He met with disappointment and bewilderment. There were long lists of symptoms, many of them no more than strings of neologisms, whose apparent object was either to conceal or to create confusion; some practical hints upon prognosis, treatment and the law; but no attempt at explanation of the abnormal thought and behaviour of the insane. The general effect produced upon the reader was as that of a museum catalogue of botanical specimens given to one ignorant of botany, but desirous of extending in this direction his acquaintance with the principles of biology. Fortunately, the volume was borrowed —not purchased. He tried others, but met with equal disappointment, and until recently had never met with a text-book of psychiatry in the English language which he cared to possess. Happily for the reviewer, he was later brought into personal contact with those who could give him the lead for which he looked, but there must have been many of his generation who abandoned the subject in despair.

Compared with these the student of to-day is in an enviable position. Doctors Henderson and Gillespie have set their text-book upon the foundation of biological principle. They do not seek to underrate the importance of physical disease, when its existence can be proved, nor do they conceal their ignorance of the part which it may play in the causation of many mental diseases whose ætiology is obscure, but they maintain the principle that in all disorders of the mind we have to consider the individual, not as a collection of organs, but as a whole, a unit of life in relation to the particular circumstances of his environment. In this sense every human life is an experiment of Nature. On the one hand are the qualities with which it is constitutionally endowed; on the other hand the strains and stresses enforced upon it by a competitive existence. The endowment may in some instances be so poor that the ordinary and inevitable stresses—puberty, social adaptation, economic and emotional independence, marriage and parenthood, bereavement—may reveal incapacity for adjustment and result in failure. Or, on the other hand, the individual may break down only under the stress of acquired physical disease or external circumstances of exceptional severity.

From this point of view mental illness may be considered as a faulty reaction on the part of the individual to his surroundings. The type of reaction may depend, as in organic cerebral disease, upon the nature of the disease process. In other conditions it is mainly determined by the constitutional endowment.

As their basis for classification, therefore, the authors take certain "reaction types" which have been formulated by Professor Adolf Meyer. These are in a sense arbitrary as all such classifications must be, but have the great merit of being intelligible, simple and few.

The term dementia præcox, which has ceased to be of value in describing a disease which frequently begins in adult life, and by no means always leads to dementia, has been discarded in favour of schizophrenia, but the authors have avoided Bleuler's error of attempting to include and explain too much under the cover of this new heading. They are careful to explain that for them "schizophrenia is not a disease but a congeries of individual types of reaction having certain general similarities. . . . The individual may be loaded in various ways—by inheritance, by physical defects of an endocrine disorder or some grosser kind, by intellectual deficiency or what not—but none of them is in itself a cause of schizophrenia. It is only when the subject, whether handicapped or not, has to face the usual concrete problems on the journey through life, that reactions can appear which cumulatively lead to one of the numerous conditions which have been included under the designation of 'dementia præcox' or 'schizophrenia.'"

The manic-depressive psychoses and involutional melancholia are described under the general heading of affective reaction-types. In criticism of this section it must be said that the frequency of *mild* depressive psychoses, especially of the involutional type, is either underestimated or under emphasised. Probably the majority of these cases never come within the purview of the psychiatrist, but they constitute a large proportion of the so-called "neurasthenics," who are an unintelligible nuisance to the general practitioner. This might well be emphasised in the section on the diagnosis of involutional melancholia, which at present only occupies a single page.

It is those chapters of the book dealing with the schizophrenic and affective types of reaction which are perhaps the most valuable. The remainder is well done and well arranged.

The descriptions of symptomatology are concise, but are amplified by numerous and detailed case histories, which the authors have inserted in pursuance of their contention that the symptoms of mental disorder can only be properly appreciated in relation to the setting of the individual case.

The student who looks to this volume as an aid to passing his examinations will be disappointed. It is a book to be leisurely read and digested, and more fitted therefore for post-graduate consumption. But for the general practitioner, as well as for those more especially interested in psychiatry, it should prove invaluable as a means of understanding and treating the patients of this order with whom they have to deal.

Dr. Henderson and Dr. Gillespie are to be congratulated upon a text-book which marks a new departure in British psychiatry.

Sport.

Cricket Club.

Guy's 1st XI v. Streatham.

PLAYED at Streatham on May 18th. With a weak side and one man short the team put up quite a good performance and almost saved the game, the last man being bowled by the fifth ball of the last over.

Scores—Streatham 211 for 7, Guy's 179 (L. S. Williams 93 not out.)

Guy's 1st XI v. Chelmsford.

PLAYED at Chelmsford on June 4th. This game resulted in a splendid win for the Hospital, for our opponents were considered a strong side in all departments. Durr won the toss and Pye-Smith and Garland opened at 12.10. Both men batted freely and 50 runs were on the board in half an hour. At 57 Garland was bowled and Spence came in. He started slowly, but lost Pye-Smith at 63. Williams and Spence then became associated and carried the score at a rapid rate to 142, when Williams was given out l.b.w. Durr had only time to hit one 6 before lunch, when the score was 153 for 3, compiled in under 1½ hours. After lunch Durr hit another huge 6 and a 4 and was caught in attempting another big hit. Spence was batting extremely well, his off driving being especially brilliant. With Van Schalkwijk, who played an excellent innings of 34, and Eustace, he carried the score to 248 for 6 before being bowled. The last three men each made some runs, which helped to swell the total to 265.

Our opponents then batted, but made no attempt to get the runs, although they had plenty of time. Durr and Van Schalkwijk bowled magnificently, and between them secured every wicket. There was no change in the bowling at all, which emphasised the steadiness of their performance. Chelmsford were all out for 155.

Scores—Guy's 265, Chelmsford 155.

Guy's

Pye-Smith, b. Moss	32
Garland, b. Saltmarsh	24
Spence, b. Boatman	80
L. S. Williams, l.b.w. b. Franklyn	36
Durr, c. Reeves, b. Turrell	20
Van Schalkwijk, c. Moss, b. Franklyn	34
Eustace, b. Moss	17
Hutchinson, c. & b. Saltmarsh	6
Schofield, b. Satlmarsh	1
Letch, b. Moss	0
Popplewell, not out	6
Extras	9
Total	265

Bowling—Durr 4 for 77, Van Schalkwijk 6 for 65.

Guy's 1st XI v. Wellingborough Masters.

THIS match was played at Wellingborough on June 27th, and resulted in a win for the Masters by 3 wickets.

Scores—Guy's 112 (Popplewell 22), Wellingborough 113 for 7 (Clarke 2 for 12).

Guy's 1st XI v. Three Counties Hospital.

PLAYED at Arlesey. Last year our opnents suffered only one defeat, and that was inflicted by our Hospital. This year they have also had an unbeaten record, and managed to preserve it after a most exciting finish.

Guy's batted first, and after some early disasters Ensor and Durr came together and with some hard hitting were largely responsible for the respectable total of 154.

Our opponent's followed in, and, apart from a stand between Goddard and Saunders, who put on 50 runs, fared badly. Nine wickets were down for 125, and victory to Guy's seemed certain. But the last wicket players kept their wickets most

pluckily, and eventually passed our total, thus winning by 1 wicket. Durr bowled extremely well for the Hospital.

Scores—Guy's 154 (G. Ensor 51, Durr 40, T. O. Garland 20), Three Counties' Hospital 164 for 9 (Durr 5 for 72).

Guy's 1st XI v. Northampton.

PLAYED at Northampton on June 15th. The team was extremely weak for this match, but nevertheless beat a very strong side, drawn from many members of the County Club and Ground. Chief credit belongs to the bowlers, and to Ensor, who played a magnificent innings of 83, and Durr, who made 53 not out, composed of four 4's and four 6's.

Scores—Northampton 165, Guy's 175 for 7.

Guy's

T. Garland, b. Matthews	3
G. Ensor, c. Matthews, b. Adams	83
A. H. Curtis, b. Hardy	3
G. J. Clarke, b. Hardy	4
J. G. Van Schalkwijk, b. Bakewell	22
J. Durr, not out	53
Eustace, c. Liddle, b. Matthews	0
J. Hutchinson, b. Matthews	0
Extras	7
Total (for 7 wkts.)	175

G. Barwell, J. B. Schofield and J. R. F. Popplewell did not bat.

Bowling—Durr 3 for 31, Van Schalkwijk 3 for 28, Curtis 3 for 41, Clarke 1 for 25.

Guy's 1st XI v. Bromley.

PLAYED at Bromley on June 18th. The Hospital batted first on a drying wicket. but it appeared to present no difficulties to our opening batsmen, Williams and Curtis, who got going at once and put 113 on the board before Curtis left for a bright 51. Spence joined Williams and runs came fast. Williams was out at 137, caught in the gully for a rapidly made 78. All the following batsmen came in to make runs quickly, with the result that we were able to declare at tea time with the score at 240 for 8 wickets.

Bromley played very quiet cricket, but it was more of a tribute to our bowling than a desire to save the game. They were all out soon after 7 o'clock for 81 runs.

Scores—Guy's 240 for 8 wickets, Bromley 81.

Guy's

L. S. Williams, c. Hill, b. Moore	78
A. Curtis, c. Speed, b. Moon	51
H. Spence, b. Hill	47
G. J. Clarke, c. Attwood, b. Frazer	14
J. Van Schalkwijk, c. Frazer, b. Hill	4
J. Durr, c. Fuller, b. Hill	11
Eustace, not out	16
V. R. Preen, c. Speed, b. Frazer	7
J. Hutchinson, b. Frazer	5
Extras	7
Total (for 8 wkts.)	240

G. Barwell and J. R. F. Popplewell did not bat.

Bowling—Durr 3 for 21, Curtis 1 for 5, Van Schalkwijk 3 for 31, Clarke 3 for 7.

Semi-final of the Hospital Cup.

Guy's 1st XI v. St. George's Hospital (Holders)

PLAYED at Honor Oak Park on July 16th. We essayed to play this match two weeks ago and had got 9 of our opponents' wickets for 129 when rain came down and stopped play.

In the second venture St. George's won the toss and decided to bat on the soft wicket. Dears and Riddell opened in very cautious style against the bowling of Durr and Curtis, who, although they could not get much turn on the ball, kept a very good length. The first wicket fell at 18, after half-an-hour's crlcket. At 26 Durr bowled Lutten, but then Riddell and Bridgeman became associated and seemed to be digging themselves in. Runs came very slowly indeed and Williams came on instead of Curtis. The change broke the partnership, for with his third ball Williams bowled Riddell. Wickets then fell very steadily. The bowling was never loose and the fielding was always clean and accurate. Two men were run out, and by 3.20 St. George's were out for 129. Bridgeman batted extremely well for 42 not out, and if he had found a partner capable of staying in he might easily have made their score into something nearer 200. Durr again bowled wonderfully well, and at all times had the batsmen "tied in knots." He beat the batsmen so frequently that it is extraordinary how he failed to get all the wickets. Curtis, too, bowled well and kept a splendid length, bowling 19 overs for 16 runs and 1 wicket.

Pye-Smith and Ensor opened for the Hospital, and each opened his score with a four. Both played carefully, but did not hesitate to hit anything loose. At 23 Ensor was caught behind the wicket and Williams followed in. He did not stay long, being bowled by a ball that came in and just grazed the off stump. Garland then partnered Pye-Smith, and they raised the score to 61 for 3 wickets before Garland was bowled. However,

when Spence arrived he and Pye-Smith played the bowling so confidently and well that they carried the score past our opponent's total without further loss. Pye-Smith played a most admirable innings for 68 not out, showing wonderful restraint at a most critical time, but yet not hesitating to hit the ball that demanded to be hit hard. It was quite the best innings that he has played for the Hospital. Spence, too, was very restrained, for his is essentially a forcing game, but he accommodated his style to the conditions.

It was a splendid win for Guy's, and puts us into the Final against St. Bartholomew's. The match will probably have been played by the time this appears in the next issue. It is a trite wish that the best side will win, but nevertheless we do, with the carefully hidden reservation in our minds that we may be that side.

Scores—Guy's 130 for 3, St. George's 129.

St. George's

G. C. Dears, c. Garland, b. Durr	7
V. H. Riddell, b. L. S. Williams	11
F. T. Lutten, b. Durr	3
G. S. O. Bridgeman, not out	42
G. R. Taylor, run out	2
J. R. Peacock, c. Ensor, b. Clarke	13
T. R. Plummer, c. Ensor, b. Pye-Smith	8
B. H. Burns, c. Spence, b. Durr	16
C. P. Bailey, b. Durr	6
H. G. Gilmer, run out	4
H. R. Ferguson, c. Spence, b. Curtis	0
Extras	17
Total	129

Bowling

	O.	M.	W.	R.
J. Durr	27	9	4	51
A. Curtis	19	9	1	16
L. S. Williams	3	1	1	7
Clarke	13	2	1	34
Pye-Smith	2	1	1	4

Guy's

E. J. Pye-Smith, not out	68
A. G. Ensor, c. Riddell, b. Taylor	14
L. S. Williams, b. Gilmer	1
T. O. Garland, b. Taylor	21
H. Spence, not out	17
Extras	9
Total (for 3 wkts.)	130

Curtis, Durr, Clarke, Eustace, Catchpole and Hutchinson did not bat.

Swimming Club.

THE Annual Gala of the United Hospitals' Swimming Club was held on Tuesday, July 5th, at the Bath Club. Each year we find ourselves recording thanks to the Committee of the Bath Club for their kindness in allowing us to use the bath, and to our very great friend and helper Sir Alfred Fripp, and as each year passes we realise what great good luck is ours in obtaining this permission and in having such a friend. Better than ever before were Guy's supported this year, and the gallery was packed with the backers of Guy's colours. Amongst those present were Sir Alfred and Lady Fripp, Mr. and Mrs. Eason, Mr. Layton, Mr. Turner, Mr. Slesinger, Mr. and Mrs. Cook, Mr. Ogilvie, Mr. Eyre, Mrs. Rowlands, Mr. Lewin J. Payne, and one who has had much to do with the previous successes of the Swimming Club, Mr. J. A. Simons.

During the evening two events of interest, other than Inter-Hospital, took place—a swimming display and a diving display. The lady members of the Bath Club gave an excellent demonstration of the art of being graceful in the water and interested all with their fancy swimming. If some of the onlookers are caught floundering in the baths in the future we will understand that they are but rendering due compliment to the Bath Club ladies. Then, too, we thank the members of the A.D.A. for their admirable display of diving; no Gala would be completely enjoyable without their help.

Of the more serious business, first came the 100 yards. In this event C. D. Malone and J. W. H. Jones were representing the Hospital, and the race resulted in a fight between these two, Jones touching away first from Malone on each length to win just by that touch. The third man, F. A. Edwards (Bart.'s), came in about 8 yards behind Malone, leading J. F. Fisher by about 6 inches.

It is sad to relate that Guy's Nurses were not at all represented. We have wept great tears over this thing—that should not have been. Also have we prayed great prayers that they may have better luck next year. The 50 yards Nurses' race was won by Miss Brock (U.C.H.) by about a foot from Miss Joyce (U.C.H.). Miss Brock deserved her win because of a more polished style.

A. J. King (London) dived well to come first in the Diving, but we are of the opinion that had Smith made a better take-off for his low dives he might have gained premier honours. W. L. James rather disappointed, perhaps he suffered from stage fright, for his diving did not fulfil the promise it gave earlier in the season. This is the third year London has gained the Diving Cup, and the third that Guy's have come second.

For the 50 yards there were only three competitors, and de Gruchy made a race of it with D. P. King (Guy's) to win by a yard. King swam well to beat J. H. West (Bart.'s) by three yards.

The 200 yards provided us with another win, C. D. Malone going away with S. E. Theis following hard. However, Malone maintained his lead and responded to a challenge from Theis over the last length to win by two yards, Vartan (Bart.'s) coming in third about half-a-length behind Theis. Malone is to be congratulated on breaking his last years' record.

Four teams were entered for the Team Race—London, Bart.'s, U.C.H. and Guy's—and, from an inter-hospital point of view, provided the thrill of the evening. Although each Guy's man, after the first length, had a slight lead, the result was never sure till de Gruchy increased it in the last length to win by two yards.

In the Nurses' Team Race we saw Middlesex lose after a very gallant fight by a yard to U.C.H., with London coming in a bad third.

A sparkling game of polo followed. The U.C.H. team seemed inspired by the occasion and played really well during the first five minutes. It is a pity that they did not keep up the tactics of attacking rather than defending. The combination of the whole of the Guy's team and the speed of the majority of its members never left any doubt as to who the winners would be. The score suggests that the game was very much less even than it was, and had our opponents played a more controlled game undoubtedly the scores would have been a more correct indication as to the way of the game.

O. M. H. Jones scored our first goal off a pass from a free throw. U.C.H. made desperate efforts to recover and Bion, although slow in his shooting, was sending in some very fast shots. That he was allowed to do so was due to the fact that the team were playing well up the bath and relying on Smith's ability to save in the shallow end.

Perhaps we are not unjustified in believing that the marking of the Guy's team, whilst defending the deep end, was closer than their marking in the shallow. Brown next scored with an excellent long shot after a "three back" movement had taken place. A burst of still harder play gave U.C.H. a goal, scored by R. S. Smith, and O. M. H. Jones immediately retaliated. Before half time Jones again scored, and we crossed over 4–1. As Jones had done most of the scoring in the first half, so Malone scored three times in the second, and C. E. M. de Gruchy scored, making a final score of 8–1. The team have to be congratulated on their well-merited success and retaining the Inter-Hospital Water Polo Cup for yet another year. Every year since 1914, exclusive of the war years, the Swimming Club have held this Cup. The Inter-Hospital Swimming Cup, too, seems to be making the "Spit" its permanent home. Possibly we shall next year win the Diving Cup and add one more to the number we already hold.

Also are our thanks due to Mr. T. B. Layton for presenting the seven pewter pots to the winners of the Water Polo Cup, and to Lady Fripp for very charmingly distributing the Cups, and so we gladly render them.

Results

100 *Yards*—

1st, J. W. H. Jones (Guy's); 2nd, C. D. Malone (Guy's); 3rd, F. A. Edwards (Bart.'s); 4th, J. F. Fisher (Bart.'s). Time, 63⅖ secs.

50 *Yards*—

1st, C. E. M. de Gruchy (Guy's); 2nd, D. P. King (Guy's); 3rd, J. H. West (Bart.'s). Time, 27⅕ secs.

200 *Yards*—

1st, C. D. Malone (Guy's); 2nd, S. E. Theis (Guy's); 3rd, C. K. Vartan (Bart.'s). Time, 2 min. 36⅖ secs.

Team Race—

1st, Guy's; 2nd, U.C.H.; 3rd, Bart.'s. Time, 1 min. 20⅖ secs.

Guy's Team—D. P. King, C. D. Malone, R. N. C. Smith, J. W. H. Jones, C. E. M. de Gruchy, S. E. Theis.

50 *Yards (Nurses)*—

1st, Miss Brock (U.C.H.); 2nd, Miss Joyce (U.C.H.).

Nurses' Team Race—

1st, U.C.H.; 2nd, Middlesex; 3rd, London.

Diving—

1st, A. J. King (London); 2nd, R. N. C. Smith (Guy's); 3rd, P. M. Davidson (London); 4th, R. S. Smith (U.C.H.).

Swimming Cup—

1st, Guy's, 34 points; 2nd, Bart.'s.

Diving Cup—

1st, London, 8 points; 2nd, Guy's, 4 points; 3rd, U.C.H., 2 points.

Water Polo Cup—Guy's, won 8–1.

Guy's Team—R. N. C. Smith; C. E. M. de Gruchy, C. D. Malone; L. Brown; S. E. Theis, J. W. H. Jones, O. M. H. Jones.

Golfing Society.

ON Sunday, July 10th, we journeyed to the coast to play the Hastings Medico-Dental Society who, as usual, surpassed themselves as hosts.

Owing to the fact that we did not arrive till 11.30 a.m., we had to undergo the strain of starting off with foursomes. In these we met our Waterloo, Hastings winning every match. Undaunted by such a defeat we set out to annex the singles, but Hastings said "No, our skill and local knowledge shall prevail!" Unfortunately, these words were only too true, as they won by 7 matches to 2 matches.

In spite of such a debacle, the games were thoroughly enjoyed and keenly contested, as on both sides there was revenge to be obtained from last year.

Results

Guy's		*H.M.D.S.*	
E. S. Phillips	0	A. Kelt (4 & 2)	1
E. J. Pye-Smith and C. D. Malone	0	J. C. Lee and D. Ligat (3 & 2)	1
P. H. Lomax and E. C. Duffett	0	A. M. Davie and H. E. Marsh (3 & 1)	1
O. Ive and S. H. Croot	0	F. J. Cutler and J. Walker (5 & 3)	1
S. L. A. Clarke and N. L. Eckhoff	0	T. Reed and E. C. Mackay (5 & 3)	1
	0		5

Guy's		*H.M.D.S.*	
E. S. Phillips	0	A. Kelt (3 & 2)	1
E. J. Pye-Smith	0	J. C. Lee (3 & 2)	1
C. D. Malone (1 up)	1	A. Murdock	0
P. H. Lomax	0	F. J. Cutler (4 & 2)	1
O. Ive	0	D. Ligat (5 & 3)	1
E. C. Duffett (4 & 2)	1	J. Walker	0
S. H. Croot	0	A. M. Davie (1 up)	1
N. L. Eckhoff	0	H. E. Marsh (6 & 5)	1
S. L. A. Clarke	0	T. Reed and E. C. Mackay (1 up)	1
	2		7

Result—Hastings Medico-Dental Society 12 matches, Guy's 2 matches.

E. C. DUFFETT, *Hon. Sec.*

Hospital Information, etc.

Pass List.

University of London.

2nd Examination for Medical Degrees.

PART II

July, 1927,

J. Carlton.
P. T. L. Day.
N. L. B. V. Eckhoff
O. Ive.
W. J. Johnson.
F. J. Napier.
T. C. Outred.
N. S. Plummer.
A. C. Price
J. M. Robertson.
C. K. Simpson.
B. Southwell

M.D.

July, 1927.

Branch I (Medicine)

T. S Blacklidge, B.S.
H. C. T. Taylor, B.S.

The Services.

Dental Officer in the Royal Navy

H. A. Ginn was successful in the competition held on June 29th and succeeding days for entry into the Royal Navy as Dental Officer, and will receive appointment as Acting Surgeon-Lieutenant.

Papers by Guy's Men.

D. Gayer Morgan, M.Ch., F.R.C.S. A Retinal Graticule, *Brit. Jour. Ophthalmology*, July, 1927.

E. G. Slesinger, O.B.E., M.S., F.R.C.S. Periarterial Sympathectomy, *Practitioner*, 1927, cxix, 49.

—— Arterio-Venous Aneurysm with Bullet Retained in Heart Muscle, *Proc. Roy. Soc. Med.*, 1927, xx, 1,326 ; *Clinical Sec.*, 62.

Philip Turner, M.S. (1) Gumma of Liver, Simulating a Perforated Gastric Ulcer. (2) Fractured Patella Treated by Wiring in 1889. *Ibid.*, 1,324, 1325, ; *Ibid.*, 60, 61.

C. C. Worster-Drought, M.D. Spastic Paresis of One Leg, *Ibid.*, 1,326 ; *Ibid.*, 62.

C. Lambrinudi, F.R.C.S. Case for Diagnosis. *Ibid.*, 1,327 ; *Ibid.*, 63.

H. W. Barber, M.B., F.R.C.P. (1) Mycosis Fungoides. (2) Benign Lymphogranuloma (Schaumann), *Ibid.*, 1,343, 1,344 ; *Sec. Dermat.*, 87, 88.

—— The Relationship of Dental Infection to Diseases of the Skin, *Ibid.*, 1,421 ; *Sec. Odont.*, 39.

A. A. Osman, M.R.C.P., and H. Carter. The Prevention of Scarlatinal Nephritis, *Ibid.*, 1,405 ; *Sec. Medicine*, 43.

T. B. Layton, D.S.O., M.S. Osteomyelitis of the Upper Jaw in Scarlet Fever, *Ibid.*, 1,430 ; *Ibid.*, 48.

—— Giddiness Persisting After Radical Mastoid Operation, *Ibid.*, 1,419 ; *Sec. Otology*, 69.

M. E. M. Jago, M.B., B.S. Notes on Several Abnormalities in the Same Patient, *Lancet*, 1927, ii, 173.

G. B. Dowling, M.D., M.R.C.P. Note on Two Cases of Lichen Nitidus, *Brit. Jour. Dermat and Syphilis*, 1927, xxxix, 285.

Births.

BROADBRIDGE—On July 3rd, 1927, at Church House, Shoreham-on-Sea, to Rose, wife of Ralph Broadbridge, L.D.S.E.—a daughter.

CHAMBERS—On July 16th, 1927, at Clare, Suffolk, to Margaret, neé Osborne, wife of R. S. Chambers, L.M.S.S.A.—a daughter.

DAVIES—On July 16th, 1927, to Anne, neé Anderson, wife of D. S. Davies, M.B., of 127, Long Acre—a son.

Marriage.

RHYS-HERBERT—WILLIAMS—On June 7th, 1927, at Caersalem, Barmouth, by the Rev. Gwynoa Davies, John Rhys-Herbert, second son of Mr. J. L. Herbert, J.P., and the late Mrs. Herbert, of Glyndwr, Tredegar, Mon., to Beti Elenor, only daughter of Dr. and Mrs. J. O. Williams, of Bryn, Barmouth, North Wales.

EDS. { P.F.S. C.
G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *August 13th, 1927.* *Number 1019*

PASSIM

IT is at this time of the year that harassed Editors of the GAZETTE, since its foundation, have wrung their brains for material while more fortunate men disport on lawns or recline in sundry craft on cool rivers. Nor is the Editorial enthusiasm stimulated by the thought that probably the GAZETTE will lie in its postal cover for the duration of the holidays.

Perhaps among the most interesting of the frequent unpublished letters that are addressed to us are those that have a tinge of criticism which, though occasionally a little more bitter than sweet, are almost always to some extent helpful, and most certainly prevent the temptation to resurrect a sea-serpent in Great Maze Pond, which we believe is at least a legitimate variety action, in the absence of less miraculous happenings or a grievance for ventilation.

It has been pointed out to us that the GAZETTE soon becomes less and less interesting to those who have left the Hospital—and we realise in full the justice of this charge. Those who leave the Hospital too soon become a name though, no doubt, this is somewhat inevitable.

From an anonymous nurse we recently received a spirited letter denouncing the exclusive masculinity of "your old GAZETTE," and we thank the lady in question for a pleasant few minutes and only wish we could have had the pleasure to see her jab her pen into her ink pot and stamp her feet while she thought out the phrases to express her indignation that the promise of a section to be devoted to the nurses at fortnightly intervals had not been fulfilled. The two representatives of the Nursing Staff on the Committee have striven greatly —and we offer our thanks for their efforts—to collect matter of interest to nurses. Is it, perchance, that garments alone form the greatest topic of interest to the sex feminine of the Hospital? Perish the thought! there must surely be some nurses capable of gentle satire or even acid sarcasm. While quite recently we recognised in a weekly publication a very vivid description of a familiar ghost that haunts the Surgical Wards. Are we wrong in surmising that this was written in the Nurses' Home? And there must be many in different parts of the world who can write of their ways of life for the joy of those who stay at home.

The same, of course, applies fourfold to Guy's men. Some time ago we conceived the idea of collecting a series of articles from old Guy's men in each of the Colonies and other countries than Britain, describing medical practice in their lands. That we have not done so is recorded by the "Angel with the sapphire pen" against our sins of omission. The shining blackness of the record may yet be rendered less obvious by the advent of many articles from the world's four corners.

▭

AT midnight some few days ago we were plodding, like the weary ploughman, to bed after a night round when we came upon a porter in a state of much agitation, who told us that the laundry had blown up, that men had been shouting —— but *now* were silent, and that steam had filled the Nurses' Home like a fog and was still doing so —— and much more.

We hastily repeated as much of Kipling's "If" as we could remember, gulped hard and hurried to the scene of action through the intricate maze behind the Home, where we discerned vaguely a building apparently bulging with steam, and giving vent to steam with a hundred thousand sizzling, hissing and roaring noises. We again grimly muttered "If," and hastened to ring for the night emergency staff, who turned out swearing horribly, and led us into the subterranean depths to the origin of this muchness of steam, where we discovered two men not steamed like a College Tutti Frutti, but calmly contemplating a large steam pipe that had given way.

▭

On Saturday last the Inter-Hospital Sailing Club held their annual Regatta, which was an extremely pleasant function, despite several mishaps to masts and rudders; the surprising fact being that though two dinghys were dismasted, no one had to swim at any time. Dr. French, the Commodore of the Club, very kindly acted as starter and arbitrator on Saturday, and Mr. McNair, Vice-Commodore, and Dr. Conybeare witnessed the activities on Sunday. Owing to calamities it was not possible to finish on Sunday, only two dinghys being in commission when London Hospital, St. Bart.'s, and ourselves tied with 13 points each. The deciding race will be sailed as soon as convenient.

We are very pleased to see the deservedly increasing popularity of this sport, and hope that Dr. French's vision of a fleet of fifty dinghys will soon be realised.

▭

At the last meeting of the Gazette Committtee Mr. G. M. Housden was appointed Editor on the retirement of Mr. P. F. S. Court, and Mr. E. T. Conybeare was unanimously elected Sub-Editor.

Some Late Effects of Head Injuries.

Clinical Lecture. By Dr. C. P. Symonds.

Part I.

GENTLEMEN,—Your experience of head injuries in the wards is confined to the surgical side of the Hospital. But, as outpatients, a considerable number of these cases appear in the Neurological Department, and it is this group which I propose to discuss to-day. Some of them have originally been in the wards; a large number, owing to the minor degree of the initial injury, have in the first place been treated at home.

The major complaint in most of these cases is of headache. Very few of them present any physical signs of disease, yet the majority are suffering from serious organic disability. A large number of them are involved in claims for compensation, out of which arise demands for reports and attendance to give evidence in the law courts. They comprise a group, therefore, in which there is particular need for just interpretation and accurate prognosis.

There are certain late effects of head injury which may lead to a fatal issue. These are extremely rare, but I shall relate an example of each in order to bring to your notice the possibility of such an event developing some weeks after what has at the time seemed a minor injury from which the patient has apparently recovered.

Chronic Subdural Hœmatoma—

The first of these is chronic subdural hæmatoma. In this condition there is a slow oozing from a ruptured vein with the eventual formation of an encysted blood clot which, if it is not removed, leads to fatal compression.

The injury may have been a slight one—not even necessarily involving loss of consciousness. It is usually one of the small veins leading from the cortex to the superior longitudinal sinus which is torn, and this it may be supposed is due to sudden movement of the brain within its imperfectly fitting dural capsule. Such movement would naturally be freest in the longitudinal direction and would occur most easily in old persons, whose brains are atrophied, and therefore a looser fit within the dural envelope, and it is actually in old persons, and as the result of a blow on the forehead or back of the head, that the condition most frequently develops.

As the intracranial pressure is normally higher than the venous pressure, oozing from the injured vein can take place only at such times as the venous pressure is temporarily increased as in coughing, sneezing, straining at stool, and so on.

Whenever this occurs there is a temporary spurt, and the effusion gradually accumulates until it attains a size sufficient to encroach upon that

margin of space which normally enables the brain to increase its volume without painful stretching of the dura. At this point bodily or mental exertion, and especially such actions as we have mentioned above—stooping, coughing, etc.—will cause headache. As the hæmatoma increases in size, headache becomes continuous, and eventually the brain itself is compressed, leading to paralysis, coma and death unless the condition is relieved.

These cases present great difficulty in diagnosis, both on account of the rarity of the condition —which lulls suspicion—and because the original injury is often so slight and the latent interval so long that the relation of cause and effect is unrecognised.

The following case provides an interesting example :—

H. Q., aged 64, by occupation a miller, was admitted into Clinical under Dr. Hurst on March 13th, 1927, in a state of unconsciousness. Three months previously he had slipped in some snow and, falling, hit the back of his head. He was stunned for a short time, but made his own way home and was quite fit and at work again the following day. Subsequent to this accident the patient suffered from headaches of gradually increasing severity, but continued at his work until two days before admission. He then somewhat rapidly became drowsy and finally comatose. On admission some spasticity of the right arm and leg was noted, with an extensor plantar response on this side.

His condition during the next few days varied. There were some relatively lucid intervals alternating with coma. We thought the case was probably one of cerebral thrombosis, but in view of the ingravescent onset and the history of injury, discussed the possibility of subdural hæmatoma, and asked Mr. Bromley to see him. His condition by then, however, was desperate, and it is doubtful whether at any time after admission he would have stood an operation. He died on the sixth day after admission and at autopsy a large subdural hæmatoma was found compressing the left hemisphere, the leakage apparently having taken place from a tributary of the transverse sinus. There was no fracture of the skull or other evidence of injury.

Cerebral Abscess—

The second of the delayed effects which may prove fatal is cerebral abscess. This as a late sequel is perhaps rarer than hæmatoma, but should still be remembered.

I have a clear visual picture in my mind of a boy who was brought to my Out-Patients some years ago on account of headache and drowsiness. His mother referred these symptoms to an accident some three or four weeks previously, when the boy had fallen on to a packing case, bruising his forehead and sustaining a small punctured wound from a nail over the right eye. He had been brought up to the surgery, where the wound was dressed, and healed in a few days. The headaches had developed a week or two later.

The boy was clearly ill with some neck stiffness and had a temperature of 100. The mother herself was under treatment for pulmonary tuberculosis. I had the boy admitted, with the diagnosis of tuberculous meningitis. He died a few days later and was found to have a large abscess in the right frontal lobe. There was a recently healed scar in the dura and a minute hole in the bone corresponding with the site of the healed wound of the forehead.

We had a somewhat similar case in the medical wards last year. This was a boy of 8, who came under our observation two months after a compound fracture of the skull, which had healed completely within a few days. On this occasion we diagnosed and localised the abscess correctly, and Mr. Bromley operated with complete success.

Such cases as these do not constitute more than 1 in 1,000—probably less—of the group we are considering. The remainder may be conveniently classified under two heads—those who are suffering from the physical effects of the injury in the shape of cerebral laceration and contusion, and those who are suffering from its psychological effects in the form of an anxiety neurosis.

Cerebral Contusion—

In order to understand the symptoms of cerebral contusion we must have a clear idea of the main factors controlling the cerebral circulation and intracranial pressure.

The brain is contained within a bony capsule which, for all physiological purposes, is inelastic. Within this the dura fits closely to the inner surface of the skull, but loosely envelops the brain. There is room, therefore, for some swelling of the brain without stretching the dura. The intracranial pressure normally depends upon that of the capillaries and veins and, as measured through the cerebrospinal fluid by lumbar puncture, is in the horizontal position about 120 mm. H_2O. Under physiological conditions the volume of the brain is increased in states of mental or physical excitement by dilatation of the capillaries. It is also increased by anything which impedes the venous outflow, such as holding the breath, coughing, or straining at stool and by the stooping posture.

The margin of space between the volume of the brain and the capacity of the dural envelope is sufficient to accommodate these physiological states of congestion without stretching the dura, and therefore without headache.

If the volume of the intracranial contents is increased from pathological causes, the first effect will be that the normal safety margin is encroached upon, so that the patient will experience headache when the intracranial pressure is further increased by any of the actions mentioned above.

If the pathological increase of volume is sufficient the dura will be subject to continuous stretching and there will be continuous headache. Beyond this point room can only be found for a pathological increase of volume by compression of the brain substance and its capillaries. This will lead rapidly to paralysis, coma, and death from failure of the medullary centres.

In a simple case of concussion, the skull, which in relation to external violence is elastic, is momentarily compressed or dented and the brain within it squeezed dry. Hence the sudden loss of consciousness which is characteristic of this condition. But the same force frequently causes widespread bruising—or multiple laceration—of the brain. As the circulation returns there is transudation from the injured capillaries with swelling of the organ as a whole. This, of course, being of capillary origin, can never be sufficient to cause capillary compression (with paralysis or coma), but may be the cause of disabling headaches.

But, quite apart from concussion, local injury —as, for instance, from a glancing blow—may cause local bruising, which, in the same way, may lead to a pathological increase of the intracranial volume.

The absence of a history of concussion, therefore, provides no evidence against the organic nature of headaches following injury.

The existence of such general and local bruising has been determined by observations made at operations on such cases. It has further been observed that such a condition may persist for many months, or even years, after the injury. The explanation of this is probably that, whereas in other parts of the body a contusion is resolved quickly by free swelling, this is not possible with the restricted cranial cavity.

These few facts of intracranial physiology and pathology provide an adequate interpretation of the clinical picture of contusion headaches.

The condition may develop after concussion, or from local injury without concussion. It may follow the injury directly—and this is the rule in cases of severe concussion with prolonged disturbance of consciousness, where we must assume the occurrence of widespread cerebral injury. Or there may be an interval of a few days between the injury and the development of the headaches —during which we may suppose swelling to have been gradually increasing. The headache is described as a pain usually of a bursting or throbbing character—general or localised. It is usually intermittent; provoked or aggravated by noise, excitement, exertion, coughing and stooping; and frequently influenced for better or for worse by alterations of posture. In common with other headaches due to increased intracranial pressure it is often at its worst on waking.

Examples of contusion headache are not far to seek, if one is on the look out for them.

A woman, aged 42, came to hospital on June 8th with the complaint of headache. On May 26th, while going to market, she had a crate fall on her head. She was knocked down and was unconscious for a minute or two. Subsequently she had severe headache, associated for about four days with vomiting. During that time the headache was continuous. Following this she complained of intermittent headache, which she described as a severe pain lasting an hour or so, and brought on by noise or mental stress. It was often worse in the early morning. This early morning headache she found was relieved if, on waking, she sat up in bed for a quarter of an hour before she started the daily round. She also found that the act of stooping would bring on a headache.

This was her spontaneous complaint, and one could hardly meet with a more characteristic description of contusion headache following concussion.

In the next instance the initial injury was so trivial that neither the patient nor her advisers were at first inclined to regard it as the cause of her complaints.

A woman, aged 49, presented herself with the complaint of severe intermittent headaches, starting in the region of the left occiput, and radiating forward into the parietal region. These were especially brought on by movement, or by lying on her left side. If she lay quite still in any other position she could obtain complete relief. The history dated back six weeks to an occasion when, after stooping to see to the fire, as she rose she struck the back of her head a sharp glancing blow on the edge of the mantelpiece. She took no notice of this at the time, but subsequently stooping to pick something off the floor, experienced a severe pain at the site of the injury. That night she had to go to bed sitting up because if she lay down " everything seemed to be moving from side to side."

The complaint of giddiness, also as a rule related to posture, is almost as common in these cases as that of headache. It is not so readily explained, but is probably due to the mechanical effect of the increased intracranial pressure upon the blood supply to the centres of equilibrium.

The onset of the headaches may be delayed, as in the following case, until the patient attemps to return to the full round of mental and physical activity :—

A man, aged 27, was involved in a motor accident on December 11th, and was admitted to Hospital the same day. He had no memory of the accident and was dazed and confused when admitted. There was a bruise over the left eye. He also had a fractured humerus and fractured ribs with a hæmothorax. On account of these injuries he was kept strictly at rest. His mental condition became clear in about 48 hours. On December 28th he was discharged from hospital at his own request. He experienced no headache until he began to get up. At first this was slight. But about a week later, having dined out on the previous night, he had a severe pain which he referred to a point deeply situated behind the left eye, and described at its worst as a bursting feeling. Subsequently, he continued to have headaches of this description which would be brought on by reading or by a bright light. If, as soon as he felt one of these headaches coming on, he lay down and rested in a dark room he could prevent its development. When seen he was free from headache, but I was able to produce one in the situation he described by temporarily compressing his jugular veins.

As the result of appropriate treatment he was free from his liability to headaches at the end of six weeks.

Treatment of Cerebral Contusion—

The object of treatment is to give the bruise or œdema the opportunity of absorption. What it needs chiefly is room, and we therefore want to give it as far as possible the whole and continuous benefit of the physiological safety margin. That is to say, we want to keep the patient from sending up his intracranial pressure from any cause.

The first step to be taken therefore is to put him to bed. We want to keep him free from mental excitement, and we therefore limit the number of his visitors and the duration of their visits. We keep the room quiet, we darken it for a period in the afternoon, during which he is encouraged to go to sleep. We prefer that he should be read to, rather than that he should read. We give him a bromide mixture during the day and, if necessary, a sleeping draught at night, and, as far as possible, except for necessities and meals, keep him lying flat on his back. In a severe case it may be wise to insist on absolute rest, involving the use of the bed pan. The bowels should be kept well open every day, both to prevent straining and also for the effect that a fluid motion has in reducing intracranial pressure. A dose of magnesium sulphate should therefore be given each morning, sufficient to produce one or two watery evacuations. If, in spite of these measures, headache persists, it is worth trying the ice bag.

Sherrington has shown that in animals an ice bag continuously applied to the head definitely lowers the temperature of the brain, therefore presumably diminishing congestion. The objection to its clinical use is the necessity of shaving the head, without which preliminary it is of little value.

Although as a rule the horizontal posture is the best, if this does not relieve the headache the patient should be encouraged to discover for himself the optimum position, and should then be helped to maintain it. In some cases the sitting posture is found to give most relief, and the patient should then be propped up as in a case of orthopnœa so that he can maintain this position at night as well as in the day.

Ten grains of aspirin at need is probably the best means of relieving pain if it is troublesome, or a powder containing aspirin gr. x, phenacetin gr. v and phenazone gr. v, but the object of treatment should be to prevent headache by the other measures described rather than relieve it.

In most cases after a few days or a week or two under this regime the patient will be free from headache. We can then begin to experiment a little, beginning to see how much more we can allow him in the way of mental and physical effort, change of posture, and so on without giving him a headache. This should be done quite gradually, and if headache occurs at any stage the patient must be put back a step or two until he is again free. Finally, when he is able to be up and about without discomfort he should be allowed at least a fortnight's holiday before returning to work.

Medical treatment of this kind as a rule results in complete recovery.

The prognosis is best if the condition is recognised and treated early. When, as sometimes happens, the patient has been allowed to carry on with his ordinary activities for weeks or months in spite of the headaches, the likelihood of complete recovery appears to be less.

Some patients, although they may make very great improvement on the lines I have described, may be left with a permanent residual disability in the form of a liability to headache on excitement or physical exertion. For these, as well as for the occasional severe case in which strict medical treatment gives no satisfactory relief, the operation of decompression should be considered. In the case of a local contusion this should be performed over the site of the pain ; in other cases a right sub-temporal decompression is the operation of choice.

It is difficult at the outset to give an accurate prognosis in the individual case; we have to be guided by the results of our treatment. In some cases recovery may be complete in a few weeks, in others it may be months before the patient is fit for work. The giddiness may outlive the headache, and in itself render the patient unfit for work involving climbing—builders, decorators, window cleaners, etc.

Apart from the pressure effects of cerebral contusion, we have also to remember the after effects which may be due to injury to special parts of the brain, such as epilepsy and mental impairment. Of these, as also of the neuroses, I shall speak in a subsequent lecture.

Acute Veronal Poisoning, Lobar Pneumonia, Bed-Sores, etc. Recovery.

I THINK the following case which occurred in my practice in Valparaiso, Chile, South America, this year, four months before I left for England, must be recorded, given the large dose of Veronal that was taken and the subsequent complications which delayed recovery. I have no notes at hand, so I will just state the bare facts as they occurred.

I was called urgently by telephone on a Sunday night, at about 10.30 p.m., by Mr. B., the husband of a lady who told him that she had taken an overdose of Veronal. I told him over the 'phone to give her salt and warm water and in large quantity, and to try and make her vomit.

I was in bed, and while I dressed my wife telephoned for a taxi. The patient's house was about 2 miles from mine, but I don't think it was more than 15 minutes from the telephone call to my arrival at the patient's house.

I found the patient deeply unconscious, sitting on a chair in front of the W.C. supported by her husband. He had managed to make her swallow some hot water and she had vomited some brownish liquid, but not very much. The patient was drenched from the husband's efforts to make her drink fluids. We got her to bed, changed her clothes and surrounded her with some hot-water bottles. My stomach tube, which I had not used for some time was useless, so I had to ring up another colleague to bring his.

The general condition was not bad. Respiration, pulse good and regular, colour good, pupils normal and reacted. I washed the stomach out with a large quantity of warm water with bicarbonate of soda till the solution came clear, the first returns from the stomach being brownish, with mucus. Before withdrawing the tube, two tablespoonsful of sulphate of soda in half a pint of water were left in the stomach.

Heart stimulants were started at once, giving hypodermically strychnine, digitalin, caffeine and camphorated oil at regular intervals. At 7 a.m. on Monday morning, while I was taking her pulse, the patient had a prolonged rigor, and during the day her temperature began to rise. The bowels had acted well. The stomach was again washed out. Monday evening, the temperature was over 39 C. A routine examination to try and account for the temperature showed signs of consolidation at the right base. The pulse had gone up, respirations short and quick. On Tuesday morning there was definite lobar pneumonia present; bronchial breathing gradually extended to about an inch above the lower end of the scapula and to the side down along the anterior axillary line, thus involving the whole of the lower two-thirds of the right lung. There was no cough, but tracheal rattling was very distressing and mucus had to be frequently wiped out of the throat and mouth.

The patient was fed through the tube at 8-hourly intervals; a pint of milk, an ounce of brandy, some sugar, an ounce of strong coffee, and one egg were given each time; oxygen was administered every half-hour for five to seven minutes at a time. The urine, which contained a trace of albumin, but no sugar, was drawn off every 8 hours when necessary. The heart stimulants were kept up, Hexeton was given instead of Ol. Camph. as being more quickly absorbed. 25 c.c. of polyvalent anti-pneumococcal serum were injected on Tuesday mid-day.

I had two nurses, good willing Chilian girls who had had some experience in some of the local hospitals, but they could not be considered trained by any means, but they did their best.

Tuesday evening, temperature over 40 C., pulse around 150, patient was kept in a sitting position. Wednesday morning patient was very bad. Two angry red patches were appearing,

one on each buttock. I sent the husband off to try and get a water mattress, and he was lucky to get the only one available, lent by one of the hospitals. To relieve the pressure on the buttocks, the patient was laid down flat with head and shoulders raised, turning her every few hours from her back on to her right side and vice versa in order to give as much freedom as possible to the left lung. Antiphlogistine was applied to the affected lung. Stimulants, feeding and oxygen were kept on with regularly, the bowels were attended to with enemata when necessary.

By Wednesday evening, the temperature was lower, unconsciousness just the same. The general condition on Thursday morning was about the same, the buttocks looked worse; that evening I thought I could hear redux crepitations, but the temperature was up again, there were, however, some slight movements of the eyelids, and more resistance in passing the stomach tube. During Thursday night there were some movements of the facial muscles and she was able to swallow a little water.

On Friday, it was clear that bedsores would make their appearance, patient was able to swallow more easily, still unconscious, there was no doubt that the lung was begining to clear.

At 4 p.m. on that day suddenly she began to talk wildly, chiefly crying out "more Veronal." The sensorium very gradually got clearer, but it was not till Saturday evening that she was more or less rational, but only on the Monday she realised that she had been very ill.

On Monday she complained of pain behind her left shoulder with again a slight rise in the temperature, nothing, however, could be detected; next morning the dry rub of pleurisy was evident. This, however, cleared up in a few days as also did the pneumonia.

Next day, Tuesday, fluctuation appeared on one of the buttocks, the abscess was incised under Ether.

On the eleventh day after the serum injection, the patient complained of pains in her joints and a general cutaneous hyperæsthesia from her hair to her toes with temperature 39 C. I was much relieved next day to see the appearance of giant urticaria with its intolerable itching; the pains and rash were relieved by hot alkaline applications and an occasional injection of 2 to 3 minims of adrenaline subcutaneously. This condition lasted about four days, when patient was frankly convalescent, except for the bedsores; the sloughs very gradually separated leaving large cavities on each buttock which extended for 4 to 5 inches deep in the direction of the ischio-rectal fossæ as proved by digital examination. My fears now were a hæmorrhage during the separation of the sloughs or a perforation of the rectum or both.

However, all went well; two daily baths of half-an-hour each, containing boracic acid were much appreciated and looked forward to by the patient.

The dose of Veronal prepared by the patient and taken by her was the contents of three whole tubes. Each tube contained Ten chololate coated tablets of half-a-Gramme each, so there were Thirty tablets of half-a-Gramme, in other words, a total of Fifteen Grammes of Veronal. Reckoning about 15 Grains to a Gramme, it comes to an equivalent of 225 Grains (Two hundred and twenty-five grains) of the drug. The remains in the cup which I saw on my first arrival in the house were about half-a-teaspoonful of thin paste besides what was sticking to the sides of a small breakfast cup. I think I can safely say that of the 225 Grains, at least 200 were taken, 25 grains being a fair estimate of the residue not ingested.

Complete unconsciousness was present from before 11 p.m. on Sunday until 4 p.m. on the following Friday afternoon, a period of 113 hours. After this it took the patient at least two clear days to fully realise the gravity and nature of her illness.

The quantity of the drug taken with subsequent recovery is in itself worth recording, but the various complications add further interest to the case. The bedsores would most probably have been avoided had trained nursing been available, but is it not probable too that such a large dose of poison circulating in the system only requires a determining factor such as a certain amount of pressure for a certain number of hours to induce mortification of the tissues, for, as far as I can remember the patient only weighed round about 45 to 47 kilos?

S. M. WELLS.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office :—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men* (*Medical and Dental*), **12s. 6d.** Post Free, payable in advance.

An unusual case of Urinary Calculus diagnosed before operation.

THIS case, a male aged 18, was admitted to Addison Ward on May 10th, 1923, for hæmaturia, followed by right-sided renal colic.

He had previously had children's ailments—pleurisy two years before and no previous urinary symptoms.

He had fourteen attacks of right renal colic in two days with marked frequency, and always the pain was at the end of micturition. On admission he was found to have tenderness on deep palpation in the right loin and hæmaturia. After the second day of colic he only had aching in the right loin. A radiogram of the urinary tract showed no opacity, and examination of the urine for tubercle bacilli was negative.

On the 16th May cystoscopy was performed, and again on the 17th under anæsthesia, and it was seen that the right ureter was obscured by a stalked, movable, round swelling thought to be a prolapsed ureter. Dye was excreted from the left ureter, but not from the right.

Operation was suggested, but refused by the parents. Patient was therefore discharged on 27th May, but attended Mr. Thompson's out-patients for about six weeks during which time he had no pain, and after that did not appear till the beginning of July, 1927.

During this time he had on several occasions attended his doctor for right-sided lumbago which had been intermittent, and eventually he came to G.U. Out-patients. During these four years he had had no colic, no hæmaturia, and as well as the lumbar aching, only frequency by day.

On admission for investigation in July, 1927, he had slight tenderness in the right loin, albuminuria and slight pus in urine. Blood urea was normal. It was therefore thought possible on this history that he might have a stone in the right renal pelvis and was X-rayed. This showed no stone in the kidneys, but a shadow an inch long and half an inch broad in the bladder. This did not seem to explain at first the right lumbago, so it was conceivable that he had a stone in the right kidney as well, but not opaque. But as the stone was at the right side of the bladder, it was thought that this might be encysted in the lower end of the right ureter. A bladder sound was passed and the stone could not be felt. This lent credence to the diagnosis. Cystoscopy was not again performed, but on the strength of these findings Mr. Thompson decided to do a suprapubic cystotomy. On the 7th July, on exposure of the bladder base, a stalked tumour was seen at the right ureteric orifice and a stone was palpated within. This was removed through an incision in the stalked mucous membrane and then the mucous membrane was excised. A tube was then sewn into the bladder.

The patient lost a considerable amount of blood after the operation and developed a Friedlander pneumonia of the right lower lobe, but on the 29th July his wound had closed and he was discharged fit and passing urine normally.

I am indebted to Mr. Thompson for permission to publish this case, of which he had seen no previous example, and which he had thought a "tall" diagnosis. Interest in the case as well as the rarity consists in the previous non-opacity to X-rays and the accurate diagnosis without the use of the cystoscope.

J. G. W.

Notice.

Biennial Dinner

DEAR MR. EDITOR,—I have nearly completed the arrangements for the Biennial Dinner, which will take place on Friday, November 4th, at the Edward VII Rooms, Hotel Victoria, Northumberland Avenue. The price of the tickets will be 14s. each, exclusive of wines.

Dr. Fawcett has consented to act as Chairman and the following gentlemen as Vice-Chairmen:—H. G. Ashwell (1880), H. E. Counsell (1884), Sir Sidney Alexander (1886), J. W. F. Jewell (1891), A. H. Spicer (1896), A. W. Ormond (1896), H. M. Clarke (1905), C. H. Mills (1919), H. L. James (1911), R. Passey (1912), P. J. Watkin (1913), C. H. Laver (1917), P. O'Meara (1920), R. Hale-White (1922), and the President of the Residents.

Yours faithfully,
E. C. HUGHES.

17, Wimpole Street,
W.1.
6th August, 1927.

Sport.

Cricket Club.

Inter-Hospital Cup.

Final.

Guy's v. Bart's.

THE final was played on our own ground because there had been difficulty in finding a satisfactory neutral ground and the two sides had agreed to toss for choice of ground. The coin was spun with the Bart.'s representative at one end and our representative at the other end of the telephone. We spun the coin and Bart.'s called and lost.

The match was played on the 23rd and 25th July.

They were luckier, however, in winning the toss for first innings and they elected to bat on a good and rather soft wicket, which promised no help at all to the bowlers. Cook and Parker opened to the bowling of Durr and Curtis. Runs came very slowly, although both batsmen were disposed to have a slash at anything off the wicket, a trait which brought about Cook's downfall at a total of 30. He was well caught by Hutchinson at backward point, who picked the ball up off the ground. Bettington arrived and was dismissed without scoring by another brilliant catch by Hutchinson, at backward point. The third wicket fell at 46, but then Mackie and Sinclair became associated and they carried the score to 154, before Sinclair was well taken behind the wicket, off Curtis, by Garland. Sinclair played a fine forcing innings, his driving being especially good. Mackie was quieter, but as effective, and he and Prowse advanced the score to 202 before the next wicket was claimed. Durr was not bowling as well as he usually does, but the pitch was very dead. Williams then came on to bowl and got two quick wickets, Curtis got two more and Mackie was run out by a very smart bit of fielding, and Bart.'s were out for 227.

It was a huge total for Guy's to face in a Cup match, with the added knowledge of Bettington's wily leg-breaks and googlies, but they were given a good start by Pye-Smith and Garland, who were not separated before 59 had appeared on the board, when Garland was caught in two minds by Bettington's googly and was bowled. Ensor batted brightly, but was soon out. Williams played restrained cricket and helped Pye-Smith and Curtis to take the score to 169 for 4, which seemed a much happier state of affairs. Pye-Smith played an extremely valuable knock for his 58. Clarke stayed in with Curtis, who was batting with quiet confidence, and by the time stumps were drawn the score stood at 210 for 7. It was an extremely good effort on the part of the team, for it is usually maintained that in Cup Ties anything over 150 is a colossal task. "Nerves" play such a large part in the usual debacle.

On Monday morning Curtis, with the sound aid of Eustace, Hutchinson and Gare, who kept their wickets up, continued to score and took the total past our opponents. We eventually led by 13 runs when Gare was bowled by Bettington, Curtis having played a splendid knock of 46 not out.

After the usual interval Bart.'s opening pair came out to begin their second venture. The wicket was a good deal drier and faster, and the altered pace must have deceived Parker who was bowled by Durr's first ball. Incidentally it was a beautiful ball with just sufficient swing and off break to beat the batsman entirely. This early success put great heart into the team, who fielded splendidly and gave nothing away. Cook was bowled at 27, by another one out of the bag from Durr which knocked the leg stump backwards. Bettington failed again, being well caught by Pye-Smith in attempting an off drive. Mackie and Sinclair again got together and, as in the first innings, runs began to come fast. Then Durr produced his special ball again and Mackie went back. Prowse joined Sinclair and the pair looked as if they were in to stay. Williams came on in place of Durr, and, in his first over, with a slightly faster ball than usual, got Sinclair taken at the wicket. It was a splendid catch of Garland's and accounted for their most dangerous batsman. In his next off Prowse snicked a ball into Durr's safe hands at slip. Then before the batsmen found him out Williams was taken off and Durr and Curtis finished off the Bart.'s innings for 125.

It now seemed certain that if our opening batsmen started well, we should easily pass our opponent's total. Pye-Smith and Garland opened and thirty-eight runs were on the board in twenty minutes, when Garland was given out l.b.w. to Bettington. Curtis joined Pye-

Smith and both batted extremely well, playing Bettington with confidence, and neither of them afraid to hit all the loose ones. At 76 Pye-Smith was bowled by a good length ball from Hodgkinson. Williams followed, but in attempting to hit a long hop on the leg stump to the boundary was out l.b.w. without adding to the total. Ensor made 1, and then Bettington got him l.b.w. The face of the game had changed entirely, for four wickets were down for 71. However, Spence joined Curtis, who had been playing very soundly, and together they retrieved the situation, eventually passing Bart.'s total without further loss.

It was a splendid victory and the team are to be congratulated on their display. The fielding was always very clean and at times brilliant Pye-Smith played two most valuable innings, and Curtis deserves special mention for his two "not out" efforts, and for his bowling in both innings. Garland kept wicket brilliantly, and his performance in running out the last man in Bart.'s second innings was truly in the nature of an astonishing acrobatic stunt. He gathered the ball yards out, falling to do so, and in falling twisted like a piece of elastic and knocked the stumps down.

Indeed, every member of the team deserves praise, for everyone tried to the last moment until the Cup was once again in the Hospital's possession.

St. Bartholomew's.

1st Innings.

N. E. Cook, c Hutchinson, b Durr ...	15
G. A. Y. Parker, c Durr, b Curtis ...	23
R. H. Bettington, c Hutchinson, b Curtis	0
K. W. Mackie, run out	66
M. R. Sinclair, c Garland, b Curtis ...	66
C. B. Prowse, c Spence, b Curtis ...	25
W. F. Gaisford, b Curtis	0
J. H. Pierre, not out	7
N. L. Hodgkinson, c Curtis, b Williams	4
J. O'Connell, c Garland, b Curtis ...	4
J. B. Bamford, l.b.w. b Williams ...	0
Extras	17
Total	227

2nd Innings.

N. E. Cook, b Durr	20
G. A. Y. Parker, b Durr	0
R. H. Bettington, c Pye-Smith, b Clarke	2
K. W. Mackie, b Durr	16
M. R. Sinclair, c Garland, b Williams ...	16
C. B. Prowse, c Durr, b Williams ...	27
W. F. Gaisford, not out	20
J. H. Pierre, b Curtis	0
N. L. Hodgkinson, b Curtis	1
J. O'Connell, l.b.w. b Curtis	3
J. B. Bamford, run out	2
Extras	18
Total	125

Bowling Analysis.

1st Innings.

	O.	M.	R.	W.
J. Durr	25	5	90	1
A. H. Curtis	27	7	61	6
E. J. Pye-Smith ...	5	0	17	0
G. J. Clarke	9	1	27	0
L. S. Williams ...	5	0	15	2

2nd Innings.

	O.	M.	R.	W.
J. Durr	16	6	33	3
A. H. Curtis	12	4	31	3
G. J. Clarke	7	1	21	1
L. S. Williams ...	4	0	21	2

Guy's.

1st Innings.

E. J. Pye-Smith, l.b.w. b Bettington ...	58
T. O. Garland, b Bettington	21
A. G. Ensor, b Hodgkinson	10
L. S. Williams, b Bettington	39
A. H. Curtis, not out	46
H. Spence, b Bettington	0
G. J. Clarke, b Hodgkinson	15
J. Durr, c Parker, b Hodgkinson	0
J. Eustace, b Bettington	7
J. Hutchinson, b Bettington	4
H. S. Gare, b Bettington	4
Extras	36
Total	240

2nd Innings.

E. J. Pye-Smith, b Hodgkinson	30
T. O. Garland, l.b.w. b Bettington ...	16
A. G. Ensor, l.b.w. b Bettington ...	1
L. S. Williams, l.b.w. b Hodgkinson ...	0
A. H. Curtis, not out	33
H. Spence, not out	17
Extras	16
Total (for 4 wickets)...	113

Clarke, Durr, Eustace, Hutchinson, and Gare did not bat.

Bowling Analysis.

1st Innings.

	O.	M.	R.	W.
R. H. Bettington ...	25-3	1	104	7
N. E. Cook	10	2	40	0
H. L. Hodgkinson ...	15	1	46	3
M. R. Sinclair ...	5	0	21	0

2nd Innings.

	O.	M.	R.	W.
R. H. Bettington ...	14	2	45	2
N. E. Cook	2	0	19	0
H. L. Hodgkinson ...	8	0	26	2
M. R. Sinclair ...	3	0	7	0

Tennis Club.

Senior Inter-Hospital L. T. Cup. Final.

Guy's 1st VI v. St. Thomas's.

THIS match, played on the courts of the Roehampton Club, amply rewarded the few spectators who turned up to support the Hospital. It must be a very long time since such a keen and interesting final was played. Guy's were fortunate in having the services of P. D. B. Spence, who not only did the major part in winning four matches, but also kept the tails of the team up when the match was going against us.

On the three available courts Spence, Pearson, and Arkles commenced the singles matches. Against Spence was matched W. B. Williams who, although not well known outside hospital tennis, had made a name for himself while playing for St. Thomas's this season by beating Kingsley of Bart.'s and only going down to Gregory of University College Hospital in the third set. Spence began as though he could rely on the mistakes of his opponent to gain him the match. He lost the first game, on his own service, to 15 points, Williams putting in some good drives down the side-lines and making Spence run about a lot. Williams won his service to lead two love. Spence was now getting warm and with some brilliant cross-court drives, followed by volleys at the net, quickly won the next two games for 2 all to be called. Spence was by no means dominating the game, Williams with some good passing shots, interspaced with an occasional cunningly-placed lob or full-blooded drive, taking the next game off Spence's service to lead 3—2.

A spell of brilliant play and Spence took the first set at 6—3.

The second set was a repetition of the first. Spence became careless and his opponent got to 5—2 and then Spence would wake up again and catch him up. This went on until Spence won the set and match at 6—3, 10—8. We do not wish to belittle the play of Williams. He played a magnificent, though somewhat unorthodox, game throughout and we were lucky to have a player like Spence to put up against him.

Meanwhile, Pearson had lost to Kah, a diminutive player who played a most persistent game. Pearson never really got going, although in the second set, which he won 6—1, he looked as though he might get the third set and the match—Kah, however, finished strongly and won that set at 6—3. We were sorry Pearson lost his match. He has done very well in all the previous cup-ties, never having lost his single before this time.

Arkles fought with his usual dogged determination against Taylor-Young, but eventually went under in the third set. Still he was fresher than his opponent at the finish and he certainly tired him out for the "doubles."

Van den Broucque struck a really good player in Pringle, who beat him 6—0, 1—6, 6—3. Van den Broucque made a great effort to win the second set, but could not stand up to the pace and accuracy of his opponent in the final set.

Trafford arrived late owing to his car deciding to run down a hill when he was not in it. He had not played for five weeks and was badly in need of practice. However he improved well enough to help win some doubles after lunch.

Boyle struck the top of his form in his single which he quickly won with the loss of only four games.

St. Thomas's had now won four matches to our two, which meant we had to win the doubles by six matches to three in order to retain the Cup.

A really dour struggle ensued. Spence and Boyle won all their matches, Van den Broucque and Trafford won the two they played, while Pearson and Lomax made up for losing their first two by winning the all-important last match, 6—4, 6—3. Lomax was in great form in this match, being not content to stand up to hit the ball, but rather to assume a sitting posture and then smite the ball and, what is more, win the point!

The team as a whole are to be congratulated on again winning the Cup.

At one time St. Thomas's led by six matches to four and it was only by dogged determination that the Cup was salved.

Results

Singles—

P. D. B. Spence beat Williams, 6—3, 10—8.
H. C. Van den Broucque lost to Pringle, 0—6, 6—1, 3—6.
R. B. Pearson lost to Kah, 2—6, 6—1, 3—6.
C. Arkles lost to Taylor-Young, 4—6, 6—4, 4—6.

H. Trafford (Capt.) lost to Coverdale, 1—6, 5—7.
V. G. Boyle beat Maxwell, 6—1, 6—3.
Doubles—
Spence and Boyle—
Beat Williams and Maxwell, 6—2, 6—1.
Beat Pringle and Taylor-Young, 3—6, 6—2, 6—0.
Beat Coverdale and Kah, 6—2, 6—2.
Van den Broucque and Trafford—
Beat Pringle and Taylor-Young, 4—6, 6—4, 6—1.
Beat Coverdale and Kah, 6—3, 6—1.
Pearson and R. Lomax—
Lost to Williams and Maxwell, 3—6, 3—6
Lost to Pringle and Taylor-Young, 4—6, 7—5, 1—6.
Beat Coverdale and Kah, 6—4, 6—3.
Guy's 8 matches, St. Thomas's 6 matches.

Junior Inter-Hospital L. T. Cup.

Semi-Final.

Guy's 2nd VI v. London Hospital 2nd.

THIS match was played at Honor Oak Park and resulted in a good win for the Hospital by nine matches to two.

Guy's had it very much their own way in the singles, only Kurtz losing his match. Kurtz played very well and had hard luck losing, as there was nothing in it in the last set which Hayward won 8—6. Incidentally Kurtz scored three more games than his opponent.

Peregrine gave his best performance of the season in beating Craner in three sets. He had been working hard for exams lately and had not played for nearly four weeks. He exhibited any amount of court-craft in the final set.

Booker made amends for his recent failures by simply walking through his opponent who never had a chance. At times his play was brilliant. One day Booker will be good if he can only be less erratic.

Gaitskell and Housden won their matches easily.

In the doubles all the team played well. Gaitskell and Housden distinguished themselves by beating their third pair without the loss of a game, and only just lost to their first strings after a very prolonged struggle. They should make a strong combination with more practice together.

Results

Singles—
S. P. Ellis beat Lynch, 6—1, 6—4.
C. E. W. Kurtz (Capt.) lost to Hayward, 6—1, 4—6, 6—8.
R. F. Peregrine beat Craner, 6—1, 4—6, 6—4.
F. G. Booker beat Walker, 6—0, 6—0.
D. K. Gaitskell beat Harker, 6—1, 6—3.
G. M. Housden beat Wasserzweig, 6—3, 6—3.
Doubles—
Peregrine and Kurtz—
Lost to Lynch and Hayward, 6—3, 0—6, 3—6.
Beat Harker and Craner, 6—3, 6—3.
Booker and Ellis—
Beat Harker and Craner, 6—1, 6—3.
Beat Walker and Wasserzweig, 6—2, 6—2.
Gaitskell and Housden—
Lost to Lynch and Hayward, 7—9, 6—0, 7—9.
Beat Walker and Wasserzweig, 6—0, 6—0.
Guy's 9 matches, London 2 matches.

Speciality.

THE BRITISH MEDICAL PROTECTION SOCIETY, LTD., 4, Margaret Street, Cavendish Square, W.1.

WE have pleasure in drawing our readers' attention to the above old-established Society, which collects debts, and is so successful that many, considered as "bad," are recovered.

A list of names, addresses and amounts owing is all that is needed, the Society does the rest with tact and promptitude. Cheques and a clear statement are rendered each quarter, and the busy practitioner saved all trouble and worry.

Numbers of genuine testimonials can be seen at the offices expressing satisfaction, thanking the Society for its help, and recommending it to others.

Further particulars will be gladly forwarded on application to the above address.

Hospital Information.

Pass List.

Society of Apothecaries of London.

July, 1927.

E. Clayton-Jones passed in Surgery, Medicine, Forensic Medicine, and Midwifery and has been awarded the diploma of the Society.

University of London.

Fourth Examination in Dental Surgery

Final B.D.S.

July 1927.

C. Hall. C. G. Walmsley.

Marriage.

HUNT—NICHOLAS—On July 6th, 1927, at Southwark Cathedral, by the Rev. E. L. Langston, M.A., William Stanley Hunt, eldest son of Mrs. and Mr. W. H. Hunt, Copse Hill, Wimbledon, to Jane Gwyneth, eldest daughter of Mr. and Mrs. John Nicholas, of Llandovery, S. Wales.

EDS. { P.F.S.C. G. M. H.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *August 27th, 1927.* *Number 1020*

PASSIM

"NECESSITY is the mother of invention." It was while we were awaiting an event which would bring a new addition and, we hope, joy to the household in which its arrival was expected, that we heard this familiar saying quoted. We had not expected to hear so true a remark in such a place and at such a time, but without doubt the strange circumstances of that night have made a lasting impression in our mind. It is at times such at this when we are called upon to write our first Passim that the words of our friend the Glass Blower are remembered. He was an old, old man with a wrinkled face and snow white hair, which shone brilliantly in the glare of the furnace beside which he worked. Our meeting was unintentional. We had been called from bed at 2 a.m. and reached our destination some twenty minutes later, our clothes dripping with the efforts of the wet English climate. It was then that we noticed the cheery glow of a fire coming from a shed some thirty yards away. Anxious to get dry again and wondering what was the reason for so large a fire in the middle of the night, we walked over and entered the shed. So strange a sight met our eyes that we wondered whether we were still in the heart of Bermondsey or had chanced upon the home of Grimm's goblins.

The Glass Blower was seated in front of a furnace, stripped to the waist, holding in his hands a long metal tube which, ever and anon, he dipped into a jar of molten glass and, withdrawing it again, blew with so mighty a blast that the glass took form and became a bottle of sea-green hue.

"Good evening," we ventured. He looked up, then put down his metal tube and commenced to fill his pipe. "How do," he replied. "Wet night outside, but dry in here," and he laughed as he patted his dry bare chest.

"Bottle blowing, we perceive," we remarked without much originality. "Quite right," he said, and added, "And have done so for the last 26 years." He finished filling his pipe and offered us some tobacco, which we refused and lighted our cigarette.

"Why do you work at night?" we asked. "Necessity," he replied, "necessity is the mother of invention. Of necessity you are here to-night and of necessity I must work at night. It is my job to keep the fires going and to blow throughout the night. Little," he went on, "do the people who use these bottles realise that I give up my night's rest in order to make them," and he puffed some thin coils of smoke from his pipe.

"For what are they?" we inquired. "Chlorodyne," he replied, "one of those patent preparations for which the public ever craves. Dr. Collis-Browne's chlorodyne is sold in these very bottles, sir," and he held one up in the glow of the furnace as though to add emphasis to his words. Then, knocking out his pipe, began to stoke his fires.

Perceiving he wished to resume his work we left him, but he has ever remained a vivid picture in our mind, which is intensified when we read of Dr. Collis-Browne's "chlorodyne."

The moral of our talk with the glass blower is this. We, of necessity, must write our Passim while other folk toy with those depressions which are centred over Iceland and which are making the month of August behave like the months of March and April. Our task is, however, harder than theirs. The phrase "Dull with occasional

showers and fairer intervals; further outlook unsettled," is for them what the diagnosis of chronic appendicitis is to the physician—a term which can be invented when the necessity should arrive. We, however, must still woo our readers with ever-changing fare, and our inventions must vary with the demands of necessity.

We should like to take this opportunity of offering our very best wishes to Mr. P. S. F. Court, who has recently vacated the Editorial chair and left the Hospital.

It is with the deepest regret that we note the passing of two old Guy's men. Dr. Allan Ramsey-Lacey passed away at the Chelmsford Convalescent and Medical Nursing Home, Durban, on Thursday, June 23rd, as the result of contracting dengue fever three months previously, at the age of 61 years.

Cyril Lloyd Jones, M.A., M.D., passed away suddenly on Saturday, August 13th, aged 74 years. He entered Guy's 56 years ago, where he did brilliantly. Throughout his life he was keenly interested in the welfare of the Hospital, and was well known in Southwark, where he practised as a solicitor for many years.

Notes on Medical Examination for Life Assurance.

By J. J. CONYBEARE, M.D., F.R.C.P.

In dealing with the medical examination of proposers for life assurance the examining doctor is placed in a relationship to the proposer which differs widely from that which is usual between doctor and patient. In the first place it must be remembered that the medical examiner is for the time being a servant of the life assurance company, from whom he is receiving a fee. Consequently, he must on no account reveal the results of his examination to the proposer himself, but should communicate them direct to the company. Not infrequently the proposer will ask whether he is a first-class life, and it is the examiner's duty to inform him that the rules of the office forbid any disclosure to the proposer himself. The importance of obeying this rule is obvious, as there may be reasons why the chief medical officer or the actuary of the company does not desire to complete an assurance, and if the proposer has already been informed by the examiner that he is a first-class life the officials of the company are placed in a difficult position. Secondly, in an examination for life assurance the examining medical officer has to try to look further into the future than is the case in his dealings for ordinary patients, most of whom are consulting him for some condition which is present at the time of the consultation. In other words, while in ordinary practice the doctor is dealing with disease either in its early or its fully developed stage, in life assurance work he is trying to assess tendencies to disease, and to judge whether over a long period of years the health of the proposer is likely to be better or worse than the average.

Most life assurance offices do not allow the proposer's family doctor to examine him for life assurance. The main reason for this practice is that it is obviously unfair to place the proposer's own doctor in the invidious position of deciding between his duty to the office and his natural inclination in favour of his patient. Moreover, the company may require a second opinion on some doubtful point in the examiner's report, and the private medical attendant's views can be obtained separately and may supplement the findings of the independent examiner. Such reports from private medical attendants are confidential and are not disclosed to the proposer.

In filling up a medical report for life assurance there are a number of general points to which the examiner must pay attention. They are as follows:—

(1) Be as concise as possible. All medical reports have to be gone through by the principal medical officer of the company, who may have as many as 30 or more a day on which he has to pass an opinion. But, although a report should be concise, it must be explicit and should express definite opinions without any attempt to "hedge."

(2) Be certain that all the questions asked in the report form are answered. It is remarkable how often answers to questions are left blank through carelessness. This involves delay and extra correspondence. Unless doing life assurance work regularly the medical examiner will be wise if he reads through the whole of the form after he has completed it before allowing the proposer to depart.

(3) Writing should be clear and legible.

We may turn now to a more detailed examination of the medical examination form. It will be found that this consists of two parts, the first

of which is a number of questions which are put to the proposer, while the second embodies the results of the doctor's examination. The first part of the form may be filled up either by the proposer himself or by the doctor, but the most usual practice is for the medical examiner to write down the answers given by the proposer, who signs them as correct with the examiner as witness. The second part of the form is naturally filled up by the doctor, who at the end expresses his opinion as to the eligibility of the proposer for life assurance.

We will deal first with the portion of the form which is filled up from the answers of the proposer. One of the most important parts of this form, from the life assurance point of view, is the family history, especially as regards parents, brothers and sisters. Where deaths have occurred the proposer is asked to state the cause of death and, if there is any doubt in the matter, the examiner should obtain the full name of the deceased, the year and place of death and write them on the form; with these particulars it is a simple matter for the office to verify the true cause of death by looking up the death certificate in Somerset House. In attempts to discover tendencies to disease, a study of the family history is most important. This is especially true in cases where a parent has died of phthisis, as statistics show clearly that among the children of tuberculous parents there is an increased incidence of the disease as compared with that among the population as a whole. Moreover, the risks of developing phthisis are greater during early adult life than after the age of 35 or 40, and therefore a family history of phthisis is more serious if the proposer is young. The practice of different offices varies considerably in the matter. Provided the proposer is apparently in good health and has only one parent with a history of pulmonary tuberculosis, a sound rule is to recommend a loading of 10 years if the proposer is under 25 years of age, 7 years if he is between 25 and 30, and 5 years if he is between 30 and 35. Above the latter age the risk may perhaps be taken at ordinary rates, provided the proposer is well up to normal weight and has no history suggestive of pulmonary trouble. If the proposer is under weight or apparently in any way unfit it is wise in the presence of a family history of phthisis to recommend the office to decline or, at any rate, to defer the proposal. In any case no proposer under 35, however fit, should be recommended at ordinary rates if a parent has died of consumption.

Death of a parent from cerebral hæmorrhage or a stroke is also an indication for caution, especially if it can be elicited that other members of the family, such as uncles or aunts, have died of a similar or allied cause such as angina or sudden heart failure. In such cases it is sometimes possible to recommend an acceptance for a short term endowment policy where a life policy—*i.e.*, one which is payable at death only—would be inadvisable.

In addition to the family history, the first portion of the medical examination form asks a number of questions relating to definite diseases such as fits, nervous breakdowns, diseases of the heart and lungs, indigestion and operations. These questions should be answered briefly, giving the date of the illness, its duration, and a note should be appended stating whether any similar symptoms have occurred since the original illness. If the latter appears to have been serious, a note should be made of the name and address of the medical attendant, in order that the office may, if necessary, obtain a medical report from him.

We may now deal with the various systems in turn which may appear to have been involved, judging from the medical history of the proposer. As regards the cardio-vascular system, a history of acute rheumatism is most important. Provided there has been only one attack with no history of cardiac involvement and, if the heart appears normal on physical examination, the case may usually be accepted at ordinary rates. Too much attention need not be paid to a history of "weak heart" or "strained heart," provided the symptoms occurred early in life and the heart appears normal. Unfortunately, only too often such a diagnosis is made in cases of slight syncopal or fainting attacks, which were of no significance.

In the respiratory system a history of pleurisy is always suspicious of tuberculosis. It is important to determine whether in addition to the pleurisy there was a pleural effusion. Such cases are always to be regarded, at any rate from the life assurance point of view, as tuberculous and should be declined, unless the attack occurred in the very remote past. Even so it is wise to insist on an X-ray plate of the chest in order to exclude pulmonary tuberculosis as far as possible. In any case, they can seldom be accepted at ordinary rates. A history of spontaneous pneumothorax also indicates tuberculosis but, if the proposer has enjoyed good health for at least 10 years after the illness, the prognosis is good and possibly the case might be taken at ordinary rates. A definite history of phthisis is usually sufficient to ensure rejection, even though the proposer may be apparently cured at the time of examination. Asthma is a disease which may be sometimes accepted at ordinary rates, provided there have been no attacks for at least five years, but careful

attention must be paid to the examination of the chest as regards emphysema and bronchitis.

As regards disease of the alimentary tract, appendicectomy may be disregarded, provided that no further symptoms have manifested themselves. A history of gastric or duodenal ulcer is often difficult to assess. If an operation such as gastro-jejunostomy has been performed the case should not be considered until at least five years have elapsed since the date of operation. In cases where there has been complete freedom from symptoms for that period the proposal may be recommended for acceptance with a loading of about 5 to 7 years to cover the possible extra risks of jejunal ulcer, obstruction by adhesions, or recurrence of ulceration. Probably duodenal ulcers are safer risks than gastric.

A history of syphilis should always preclude acceptance at ordinary rates, for however thorough treatment may have been there is always a possible risk of the development of tabes, general paralysis or cardio-vascular syphilis in middle life. A note should be made of the date of the primary infection and the duration of treatment. With a history of syphilis a loading of 5 to 7 years is advisable to cover these extra risks. Gonorrhœa without evidence of stricture or other complications is not a bar to acceptance at ordinary rates, provided there has been only one attack. Where attacks have been repeated, the habits of the patient are generally not such as conduce to longevity and the proposal is best declined.

Occasionally a history of albuminuria or glycosuria is obtained, and such cases must be treated on their individual merits. No case with a history of glycosuria should be accepted without a thorough investigation such as sugar tolerance curve carried out by a reliable chemical pathologist. A history of transient albuminuria occurring in early life may generally be neglected provided there is no evidence of nephritis.

All life assurance offices ask a question about the consumption of alcohol. Needless to say, few proposers will admit to alcoholism, but the astute medical examiner can usually detect from the general appearance anything suggestive of chronic intemperance, and such cases would naturally be rejected. A similar remark applies to indulgence in drugs. Admissions of occasional lack of sobriety in the remote past made by over-scrupulous proposers may be disregarded, as for example, when a middle-aged clergyman informed me that he had got drunk at an Oxford rowing dinner 20 years before.

When all the questions in the first half of the examination form have been answered it is handed to the proposer for signature, and this is witnessed by the medical examiner.

A physical examination is now made and the results written down in the form. Very often the examiner will have already formed a shrewd idea as to whether the proposer is likely to be an eligible one. Weight and height, together with chest measurements and the abdominal girth, are asked for by all offices. If the proposer is markedly overweight, and particularly if the abdomen is larger than the chest, the life is a poor one and the proposer should only be recommended for an endowment assurance, maturing at about 55 years of age or younger, and even so an additional premium will probably be required. Underweight is less serious provided the proposer appears to be in good health and there is no history of tuberculosis in the family.

In the examination of the heart the presence of systolic murmurs may lead to difficulty. If there is no history of rheumatic fever and if the murmur is only heard during certain phases of respiration it may usually be neglected. Needless to say, any murmur indicative of valvular disease will lead to rejection. The blood pressure is usually asked for if the proposer is over 40. Occasionally it is found that the first attempt may give an unduly high reading; if this is so it should be tested again. A blood pressure of over 150, whatever the age of the patient, may indicate the onset of hyperpiesia and the proposal should be declined. Low blood pressures, provided they are not below 100 systolic, do not appear to be of much significance. The pulse rate should never be above about 90; it is often found that early in the medical examination the proposer is unduly nervous and may have a pulse rate of 110 or more; usually, later, the rate will drop to a normal one. If by any chance it is impossible to get a lower reading than 90 it is important for the examiner to make a note as to whether he considers the tachycardia to be due simply to nervousness or to any other cause.

Examination of the lungs will seldom reveal any evidence of disease, but the shape of the chest and the amount of expansion are important. As a rule, an expansion of under $2\frac{1}{2}$ inches may be regarded as an unsatisfactory feature, which is suggestive of emphysema.

A specimen of urine is always required and has to be examined for albumen and sugar. Albuminuria is remarkably common at life assurance examinations in persons under 25 years of age. The practice of most offices is to require three further specimens at later dates; at least one of these should be examined microscopically. Provided all the subsequent specimens are free of albumen, the life may be recommended at ordinary rates. The discovery of sugar in a young proposer

may be of small significance, but such a case always demands a most thorough chemical investigation. Albuminuria or glycosuria in older people is a more serious matter and such cases must usually be declined.

Examination of the abdomen seldom reveals anything of importance, but, as has already been mentioned, a marked increase of the abdominal fat is of serious import. The teeth should always be examined and proposers with thoroughly septic mouths declined, not so much because of any definite risk to life resulting from pyorrhœa or caries, as because such inattention to ordinary hygiene probably indicates carelessness about their health in other respects.

In cases where there is a history of syphilis, special attention should be paid to the pupils and the deep reflexes. In cases of possible alcoholism tenderness of the calf muscles may be elicited.

Having completed the physical examination, the doctor has to express an opinion about the life, taking into account both the history he has obtained and the results of his physical examination. A definite opinion should always be expressed as to whether the life is an average risk, acceptable at ordinary rates, or an under-average risk, which might be taken with a loading, or whether the proposal should be deferred or declined. Where the life is not an average one, a brief statement should be made of the grounds on which such a decision has been reached.

Three Cases from the Obstetrical Department.

Three Cases of Ruptured Uterus during Parturition.

THE interest of the following cases lies in the fact that in no case was there before parturition any reason to suspect that the termination of the pregnancy would be attended with such disastrous results.

Case 1—

A. K., aged 40 years, had her last period on December 5th, 1925. The present was her ninth pregnancy. Of her previous parturitions eight had been spontaneous deliveries, at full term, and there had been one miscarriage, at six weeks.

Her last child, a male of 7 lbs., had been born in May, 1924, the delivery being spontaneous and taking 3½ hours. The present labour began at 2 a.m. on September 21st, 1926. The patient was first seen by the extern two hours later. The presenting part was high, the presentation a vertex, and the fœtal heart was heard to the right of, and level with, the umbilicus, the rate being 120 per minute. The patient was described as "a small woman with a prominent, rather anteverted, abdomen." Her temperature was 98.4°, pulse 84. The pains were very infrequent.

At 5.40 a.m. the membranes ruptured. An R.O.A. was diagnosed, the os being three-quarters dilated. The pains had now ceased, and syr. chloral hyd., 1 dr., was given. A few pains followed this, but the pains again ceasing, the patient was put to bed and in half-an-hour was asleep.

At 12 noon the patient was again visited. She was having a light lunch in bed. She had had no pains for the last six hours.

At 3 p.m. the extern was recalled. The patient had had a very severe pain, with slight loss of blood per vaginum, but had quickly recovered and was lying across the bed and able to bear down with short pains.

Her condition was not good, pulse 115, and very feeble. The fœtal parts were easily palpable per abdomen. On vaginal examination the vertex was felt and about 2 ozs. of blood followed the examination. The pulse was watched and grew weaker and more rapid. The patient was becoming cold and restless and the respiration rate was now 35.

The patient was taken to hospital and preparations made to operate. Intravenous gum was given, but the patient died soon after admission.

The child was a female infant of 9 lbs. The internal conjugate was measured and found to be 4 inches. Sections of the uterus were taken, but no cause was found for the rupture.

This was a case of *spontaneous rupture* of the uterus during what appeared to be a normal delivery. It is interesting because no cause was apparent why delivery should not be normally terminated and because labour pains had been almost completely absent up to the time of the uterine rupture.

Case 2—

A. W., aged 42, had had seven full-term deliveries, with all of which instruments had been used, except the last one. Because of this history, and because she had a breech presentation with the present pregnancy, the patient was admitted

to hospital at the onset of labour. On admission a breech presentation with extended legs—which was not engaged—was diagnosed. The cervix was ¾ dilated. The pains were strong and at regular intervals. An anæsthetic was given and a leg pulled down. This was followed by slight hæmorrhage, which ceased in a few minutes. The cervix was examined and found to be intact.

Two hours later the patient delivered herself of the buttocks of the fœtus. The arms became extended and an attempt to pull down an arm was made, but was unsuccessful. This attempt was followed immediately by the sudden collapse of the patient, whose pulse became very feeble and rapid. The condition of the patient indicating that delivery should be completed with all speed, an anæsthetic was given and a still-born child was easily delivered.

Delivery was immediately followed by a severe hæmorrhage. The placenta was expressed and the uterus retracted well, but the bleeding still continued. Examination per vaginum revealed a tear in the lower segment of the uterus, which had opened up the left broad ligament. This tear was rapidly plugged and intravenous gum-saline given. The patient died half-an-hour later.

At autopsy a tear 3 inches in length was found in the left lower segment, which had torn across the left uterine artery. There was no evidence of disease of the uterine muscle.

There is no doubt that the moment of rupture coincided with the sudden collapse of the patient during the unsuccessful attempt to bring down the arms. At autopsy no evidence could be found —either macro- or microscopically—which would prove the presence of disease of the musculature of the uterine wall. It would therefore seem clear that the catastrophy during delivery must be directly attributed to the difficulties attending the delivery of the complicated breech. Had the fœtus presented by the vertex the patient would probably have been safely delivered.

This then was a case of *traumatic rupture* of the uterus, which was brought on by the manipulations during delivery. It is unusual in that the predisposing factor of undue stretching of the lower segment of the uterus was absent and also in that, in view of the extensive damage that was done, the trauma appears to have been relatively slight.

Case 3—

C. H., aged 36, began her labour at 5 p.m. on January 24th, 1927, her last period having been on March 21st, 1926. The patient had previously had seven spontaneous full-term deliveries, in each instance a normal living child being born. The last labour in March, 1924, had taken 1½ hours, a normal female child of 9¾ lbs. being born.

The patient was examined at 8.25 p.m., 3½ hours after the labour had commenced. The abdomen appeared unusually large. On abdominal examination only one fœtus was felt, but the presentation could not be determined, and the normal hard rounded prominence of the head could not be palpated. The lie appeared to be transverse. On vaginal examination the presenting part could be felt high up, and a diagnosis of a shoulder presentation was made. The " bag of waters " could not be felt, and the patient gave a history of " having lost a little for the last week." Pains were fairly strong at regular five-minute intervals. The R.O. was called.

At 9.45 p.m. the R.O. examined the patient and decided the presentation was a breech with extended legs. As the fœtal head could not be palpated through the abdominal wall it was decided to make an examination under an anæsthetic. The fœtal heart was 140 per minute.

At 11.30 p.m. the patient was anæsthetised and the diagnosis confirmed as follows : Presentation, breech ; position, left sacral posterior. The fœtal head was not felt.

From 12 midnight the patient was in a drowsy condition, and by 1.30 a.m. the pains had completely ceased. The fœtal pulse was 156 and the patient's pulse 96. An enema was given.

At 4.20 a.m. another examination was made, when it was discovered that no progress had been made. Pains were still few, about every half-hour. It was decided to take the patient into hospital for further examination.

On arrival at hospital the patient started having severe pains; the fœtal heart was 160 and the patient's pulse 125, respiration, 30. An examination was made under an anæsthetic. A breech presentation was confirmed, the cervix being fully dilated.

The pains were now very severe and almost continuous, the uterus appearing to rise up in the abdomen. It was decided to pull down a leg, and for this purpose anæsthesia was induced. At the commencement of the induction the patient had a very strong and prolonged uterine contraction, and this, when at its height, suddenly terminated, and immediately a small amount of blood was observed to escape per vaginum. Simultaneously the pulse became very rapid and feeble. In view of these sudden symptoms a diagnosis of ruptured uterus was made, and the idea of pulling down a leg was abandoned. The patient was now ashen pale and her pulse scarcely perceptible. Intravenous gum-saline was given and a laparotomy performed. A large female anencephalic

monster of 12 lbs. weight was lying free in the abdomen, floating in a mixture of blood and liquor amnii, the placenta being still attached to the uterus. A hysterectomy was performed and the abdomen closed. The patient made an uneventful recovery.

A large tear was present in the anterior uterine wall, which commenced at the lower segment and ran up as far as the fundus of the uterus.

This, then, is a case of *spontaneous rupture* of the uterus, but, unlike the first case, there was an ample predisposing cause in that the lower segment had become unduly thinned as a result of the very strong uterine contractions which had occurred following the absence of any advance in the fœtus.

In this case great difficulty had been found in determining the presentation of the fœtus and the lie of the fœtal head, which could not be felt on examination. Both of these difficulties should have given warning that the confinement was extremely likely to be abnormal.

These three cases illustrate the very characteristic general signs which accompany rupture of the uterus. In all of them the most striking clinical change was the sudden collapse of the patient, accompanied by rapid deterioration in the volume of the pulse.

Immediately following the rupture, without exception, there was loss of blood per vaginum, and it was on these considerations that the diagnosis was made which, in the first case, was confirmed by the ease with which the fœtus could be palpated through the abdominal wall as it was lying free in the peritoneal cavity.

My thanks are due to Mr. Chapple and to Mr. Cook for permission to publish these cases.

G.M.H.

The Trend of Modern Research.

On the Influence of Carbohydrate on Ingrowing Toenail.

By R. Spey-Cyrile and A. Spearmint Smith, Beachcomber Research Fellows.

IN 1489 Aquebus first described the condition of ingrowing toe-nail. He himself suffered from the complaint, which he attributed to the wrath of the Gods, who were angered by the wicked conduct of his elder brother ! William of Tyre in 1632 gave an account of several cases, one of his most striking being that of a hermit who by reason of the severity of the condition and of its bilateral occurrence gained great notoriety and not a little pain. Cases were next recorded by Gray Hill in 1770 as occurring amongst anglers in Wessex. Later, in 1812, John Silver confirmed Hill's work and, after careful investigation, concluded that the Wessex ale was the causative factor. This theory of the pathogenesis was denied in 1824 by Simon Magnus who, after observing many cases, came to the conclusion that only those closely connected with horses—coachmen, stable lads, etc.—were liable to develop the disease. The occupational factor was supported by Levin in 1835, though this worker found bakers particularly susceptible. This is, of course, of special significance owing to the influence of carbohydrates, which was noticed by later workers. From that time until 1911 little was written on the subject of I. G. T. N., although Bucene in 1898 recorded the relief of the pain associated with the condition achieved by amputation of the affected toe, the amputation being performed with a wooden handled gross-grained saw. In 1911 Zadig, Spigot, Ruysded and John Tully described cases. Spigot observed that amongst people who developed ingrowing toe-nail, those who habitually used only one side of their mouths for chewing their food showed the lesion on the side devoted to chewing. Lansom, in 1912, partly confirmed Spigot's work, but found the toe lesion present on the side *opposite* to the active chewing side. He further concluded—quite unjustifiably in the opinion of one of us (A. S. S.)—that the non-appearance of the disease amongst income tax collectors was attributable to their almost exclusive diet of champagne and sherbert—a diet requiring practically no chewing.

In 1918 the authors fed 10 guinea pigs for 10 weeks on Maze Pond biscuits. Each of the animals developed some degree of a condition allied to ingrowing toe-nail. At the end of that time, however, all the animals died of an intercurrent infection—distemper—so that definite conclusions could not be drawn. Further experimentation was carried on in 1921, when an opportunity was given us to examine five cases of ingrowing toe-nail in one family. Three were allowed a full carbohydrate diet, while the other two were limited to Midolia biscuits and Boxo. In the former three the condition progressed and the size of the nail increased by from 5 to 8 mm. in 15 weeks—interesting results in view of the figures given by Sofiant and Nym. In the later

two the condition remained stationary, though as the first died of broncho-pneumonia on the fourth, and the second of tuberculous meningitis on the seventh week, they were not satisfactory controls. Our conclusion, however, is that carbohydrates affect the development and increase of ingrowing toe-nail.

We wish to express our indebtedness to Dr. Strabismus—whom God preserve—of Utrecht for his assistance and guidance.

A carefully compiled bibliography has been held over from want of space.—(ED.).

Tail Piece—Some weeks ago there appeared in the GAZETTE an appeal for a revival of research. May I suggest that as long as the published papers continue to be in this form—as they usually are—there will be little increase in real research. It is to be hoped that there may appear one day a paper without a single reference to the literature—a paper consisting entirely of a record of work done.

Clubs' Union Council—Blues and Half-Blues.

ALL members of the Clubs' Union who have at any time been awarded either a Blue or a Half-Blue are informed that the new blazers and crests for Blues or Half-Blues can be obtained at the recognised outfitters on production of the authorisation slip.

R. L. DUCHESNE, *Hon. Sec.*,
Guy's Hospital Clubs' Union.

AWARD OF BLUES AND HALF-BLUES
1926–27

Fencing

C. H. Johnson (Full) S. A. Scorer (Half)
E. L. Monkhouse (Half)

Rowing

E. Clayton-Jones (Full) W. H. Miller (Full)

Soccer

H. Ginn (Full) L. Ashling (Half)
J. White (Full) J. W. Small (Half)

Track Running

C. W. Harrison (Full) T. O. Garland (Half)
S. R. Druce (Half)

Rifle Club

H. E. Harding (Full) R. L. Duchesne (Full)

Swimming

C. D. Malone (Full) R. W. Stephenson (Full)
C. E. de Gruchy (Full) O. Jones (Half)

Tennis

H. C. Van den Broucque (Full) H. Hoakai (Full)
L. Parker-Tupling (Full)
C. Arkles (Half) R. L. Peregrine (Half)

Cross Country

T. M. Calhaem (Full) R. A. Q. Lay (Half)
M. P. Way (Full) W. S. Pitt-Payne (Half)
H. G. McComas (Half)

Rugby

F. H. B. Spence (Full) T. O. Garland (Full)
F. J. Wilkinson (Full) A. J. D. Lewis (Full)
A. Simpson-Smith (Full) C. D. Malone (Half)
L. Brown (Half) J. H. Richmond (Half)
J. C. T. Tregarthen (Half) I. K. Thomas (Half)
J. F. Barnes (Half) J. C. Hutchinson (Half)
O. Ive (Half) D. S. Clogg (Half)

Boxing

R. N. C. Smith (Full) C. D. Malone (Half)
C. V. Harries (Full) T. Calhaem (Half)

Change of Address.

Henry E. Lewis, 163, West End Lane, N.W.6.
Harold Trafford, Brightside, Warlingham, Surrey.
A. C. Taylor, 9, Royal Terrace, Southend-on-Sea.
C. T. Anderson, O.B.E., 8 & 9, Mutual Buildings, Darling Street, Cape Town, S.A.
J. H. Anderson, Southwark Hospital, S.E.22.
H. C. C. Taylor, M.B., B.S., Nun's Green, Friar Gate, Derby.
E. Royston Saul, Sneyd House, Fareham, Hants. Tel: Fareham 240.
Gordon Fellows-Smith, L.D.S., R.C.S., 314, Stuttafords Buildings, Durban, South Africa.
S. A. Pleasant, L.D.S., R.C.S., 109, Maple Road, Surbiton, Surrey.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

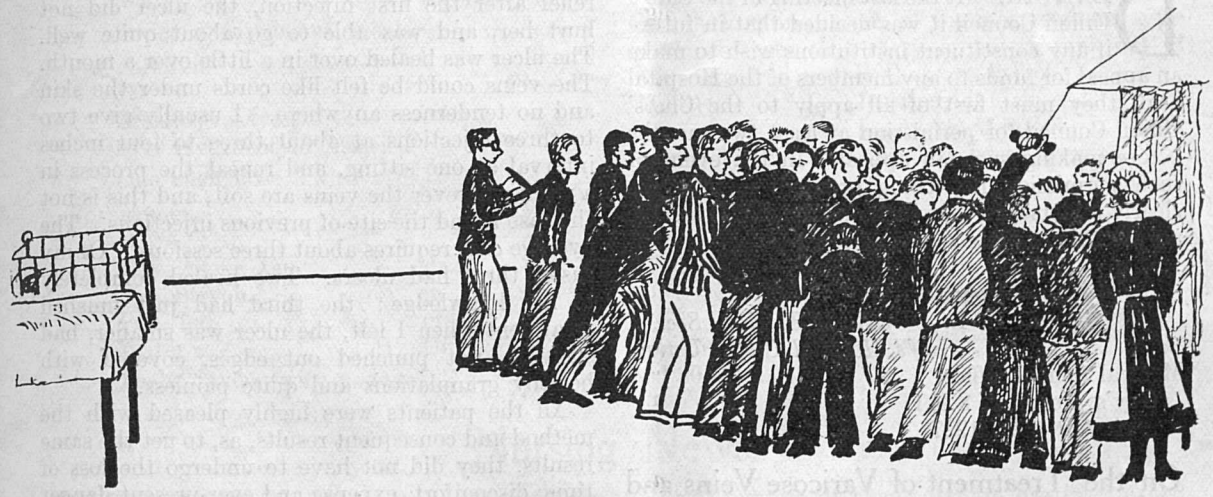
Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

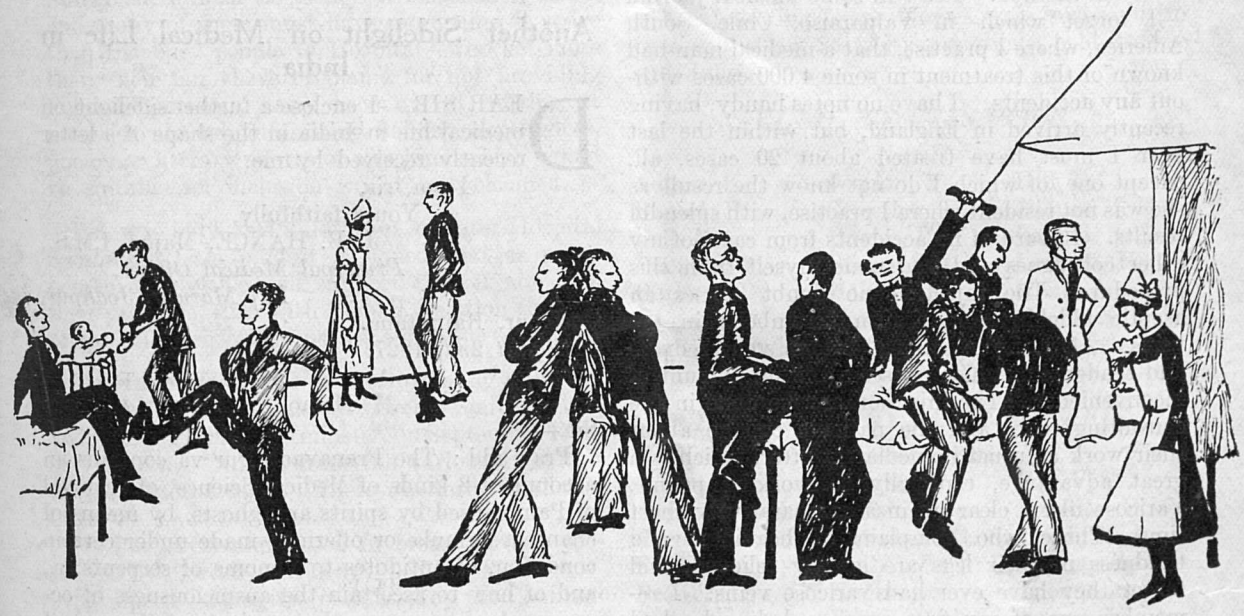
Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

THE ROUNDS.



AS IMAGINED



THE REALITY

Correspondence.

Club's Union Council and Appeals.

DEAR SIR,—At the last meeting of the Clubs' Union Council it was decided that in future if any constituent institutions wish to make an appeal for funds to any members of the Hospital Staff they must first of all apply to the Clubs' Union Council for permission at least two months before making such an appeal. In the event of such permission not being granted, it must be clearly understood that such an appeal will receive no attention whatsoever.

I am,

Yours faithfully,

R. L. DUCHESNE, *Hon. Sec.,*
Guy's Hospital Clubs' Union.

Medical School Office,
Guy's Hospital, S.E.1.
August 15th, 1927.

On the Treatment of Varicose Veins and Ulcers by Injection.

DEAR SIR,—I saw a letter of inquiry in the *British Medical Journal* this month from Major-General T. M. Corker, A.M.S., with regard to the treatment of varicose veins by the injection method. I saw in some medical journal —I forget which—in Valparaiso, Chile, South America, where I practise, that a medical man had known of this treatment in some 4,000 cases without any accidents. I have no notes handy, having recently arrived in England, but within the last year I must have treated about 20 cases, all, except one, of which I do not know the result as she was not resident where I practise, with splendid results. I heard of no accidents from cases of my other colleagues and had none myself from this procedure. The injection no doubt causes an aseptic phlebitis and a firm thrombosis in the veins. After the injections there is some redness and tenderness, which causes a certain amount of inconvenience. The injection can be done in the consulting room and the patients can go about their work as usual immediately after, which is a great advantage, especially to working people. Varicose ulcers clear up in a comparatively short time. Those who complain of heaviness and tiredness in their legs are greatly relieved, and forget they have ever had varicose veins. I remember one of my first cases, a lady who had extensive varicose veins reaching to well above the knees and a very painful varicose ulcer in the usual place of about the size of a shilling. She was not well off and could not afford to lie up, having a large family of eight, and dreaded to get up in the morning to do her housework. She got relief after the first injection, the ulcer did not hurt her, and was able to go about quite well. The ulcer was healed over in a little over a month. The veins could be felt like cords under the skin and no tenderness anywhere. I usually give two to three injections at about three to four inches interval at one sitting, and repeat the process in a week wherever the veins are soft, and this is not the case round the site of previous injections. The average case requires about three sessions. Of my cases, three had ulcers. Two healed completely to my knowledge; the third had just finished treatment when I left, the ulcer was smaller, had shelving, not punched out edges, covered with healthy granulations and quite painless.

All the patients were highly pleased with the method and consequent results, as, to get the same results, they did not have to undergo the loss of time, discomfort, expense and ever-present danger of a surgical operation.

Yours faithfully,

S. M. WELLS.

66, Queensborough Terrace,
Hyde Park, London, W.1.

Another Sidelight on Medical Life in India.

DEAR SIR,—I enclose a further sidelight on medical life in India in the shape of a letter recently received by me.

I am, sir,

Yours faithfully,

J. B. HANCE, Major, I.M.S.,
Principal Medical Officer,
Raj Marwar, Jodhpur.

Jodhpur, Rajputana.
August 2nd, 1927.

[*Copy*]

Memo.

Sir,—

Pray add: The Pranavada Pur va contains an account of 8 kinds of Medical Science, of removal of Pain caused by spirits and ghosts, by means of chanted formulæ or offerings made under certain condition, of antidotes to Venoms of serpents, r., and of how to ascertain the auspiciousness of occasions by examining the respiration of men, of the 10 currents of vitality in man's body; and of things which are agreeable to these currents in various forms of existence (such as that of men, animals, etc.). It contains 13,00,00,000M. Padas.

For men

R/

Ext. Arjun Liq.	dr. 1
Pot. Iod.	grs. iii
Liq. Strychninae	m. i
Water	oz. i

Twice a day before meals.

For children

R/

Seelajeetrasayan

Syr. Hydrocotyle Asiatica

One such dose Twice a day.

For women

R/

Ext. Asoka Liq.	dr. I
Liq. Strych.	m. I
Pot. Iod.	grs. II
Water	Oz. I

To be taken twice a day.

"Flesh is unnatural food and therefore tends to create functional disturbances. As it is taken in modern civilization it is affected with such terrible diseases (readily communicable to man), as cancer, consumption, Fever, Intestinal Worms re., to an enormous extent. There is little need of wonder that flesh eating is one of the most serious cause of the diseases that carry of ninety nine out of every hundred people that are born."

Dr. Josiah Old Field,
D.C.L., M.A., M.R.C.S., L.R.C.P.
(Senior Physician, Lady Margaret, Hospital, Bombay)

and oblige.

We remain,
Sir,
Yours faithfully,
(Sd.)

Ladnun,
d/30.VII.27

Nursing News.

COMPLAINTS have been received from Guy's nurses who have left the Hospital on the scarcity of nursing news in the GAZETTE. This could be remedied if some of them came forward and wrote articles on work or play which would interest readers in the nursing world. Surely there must be plenty of material at hand, and many of them must have more time to spare than the busy people *in* Hospital—who get more than their fair share of blame for not providing items of interest. Any accounts of nursing at home or abroad, interesting holiday experiences, poems or literary efforts of any kind which would be suitable for inclusion would be welcomed.

Below is published a notice of an Inter-Hospital Swimming Gala, and it is hoped that as many people as possible will support this, if not with their presence, then with a small donation towards prizes, the hire of the baths, and other expenses.

The Inter-Hospital Nurses' Swimming Club will hold the Annual Gala at Great Smith Street Swimming Baths, Westminster, on September 17th, at 7.45 p.m. Nurses from the various Hospitals compete in the races. There are three Challenge Cups.

(1) For style and speed in breast stroke (presented by Lord Knutsford);

(2) Speed—2 lengths (presented by the Countess of Donoughmore);

(3) Neat Diving Cup.

Other races include a Uniform Race, when the various nurses swim in their own hospital uniform, and a Candle Race.

The Countess of Donoughmore has been asked to present the cups and prizes.

Tickets may be obtained at the Hospital:—

	s.	d.
Bath Level	2	4
Front Row (Gallery)	2	4
Gallery	1	2

The following Guy's Nurses were successful in passing the last State Examinations, held in May and June:—

FINAL EXAMINATION

Nurses

Adlam, K.	Coudon, M.	Hill, B.
Barnes, E.	Crowther, E.	Jillings, J. M.
Bell, M.	Davies, P.	Lafone, K.
Buckley, M.	George, M.	Latham, D.
Burland, D.	Hall, M. L.	Mann, J. J.
Carnegie, G.	Hannington, E.	Moore, N.
Christopher, E.	Heap, E. A.	Saltmarsh, M.
Court, C.	Henderson, D.	Thomas, G.

PRELIMINARY EXAMINATION

Probationers

Anderson, S.	Falcon, M.	Poë, V.
Andrews, E.	Haffenden, G.	Prentice, H.
Barnes, V.	Hawkings, G.	Smith, M. F.
Bovington, —	Hill, V. B.	Thorne, I.
Brewer, D.	Hughes, K.	Thompson, J.
Canning, J.	Norris, M. J.	Turner, K.
Cox, F.	Outram, M.	Waddington, J. M.
Davies, D. R.	Page, K.	Walker, F.
Etherington, D.	Pechey, P.	West, E. M.

Reviews.

The Conduct of Medical Practice. By the EDITOR of the *Lancet* and EXPERT COLLABORATORS. Published by the *Lancet*. *Price* 10*s*. 6*d*.

THE *Lancet* special publications have already achieved a well-deserved popularity. *The Conduct of Medical Practice* is the most recent addition to those excellent publications, and presents in book form collected essays which have appeared in the *Lancet*.

The growing tendency of obtaining the services of expert collaborators in compiling a book has already shown its value, in spite of the fact that the individual style and points of view of the various authors are occasionally apt to render the publication disjointed and difficult of perusal. The Editor of the *Lancet* is to be congratulated on overcoming this difficulty and producing a valuable and readable contribution to general medical literature.

The object of the book is to deal with medical practice and not with the conduct of practitioners. As is pointed out on page 54: "He (the practitioner) receives no training or information in what may be called the business side of his profession. . . ." This publication supplies that information, not only with reference to the transfer of practices, but in other non-medical considerations of general practice.

Due consideration is given to the choice of practice, town or country, the type of practice, appointments and educational facilities for the children of married practitioners, and the advantages of a temporary post in an established practice receive due emphasis.

Much valuable advice is given in the chapters devoted to panel practice and the certification of patients.

The subject of giving certificates is a matter we feel requires particular attention, and the pages devoted to certification of patients are especially worthy of careful study.

There is apt to be considerable laxity among doctors in signing certificates. The majority are signed and forgotten, but occasionally a certificate is returned, as, for example, an incorrectly filled death certificate, or a legal action ensues in which the certificate becomes an important document, liable to severe criticism. It must be remembered that every certificate requires extreme accuracy and detailed consideration, and we cannot do better than quote the following admirable dicta from *The Conduct of Medical Practice*:—

"The practitioner should only certify that which he is prepared to confirm on oath—that is the crucial test," and "It is a good plan to write a certificate in draft, and before copying to go through it with the thought that it may one day be produced in court, and perhaps criticised unkindly by an advocate who wishes to distort its meaning."

The regulations governing the sale of dangerous drugs are dealt with in a concise and lucid chapter.

Part IV of the book is devoted to the study of medico-legal questions. This is admirably written, crisp and concise, and avoids the meticulous details of court procedure, trials, coroner's courts and advanced legal technicalities.

The young recently-qualified practitioner called as an expert witness for the first time is usually in a singularly unhappy state of mind, unaware as he is of the questions he may be called upon to answer or the opinions he may be expected to give.

These few pages give a valuable insight into the legal aspect of the professional man's duties.

Income and retired pay are alone discussed in the chapters on the services, detailed information being readily accessible from the appropriate authorities. The disadvantages of a somewhat nomadic existence in the Services and the climatic conditions in the Colonies must be duly considered, for example, as well as the remuneration.

The book ends with an appendix containing excellent suggestions for book keeping, and information on the assessment of income tax the latter in as simple language as possible for so abtruse a subject.

The Conduct of Medical Practice is especially recommended to the recently-qualified member of the profession, who will find in it a wealth of sound advice which will undoubtedly assist him in whatever branch of medicine his future life may lead him. To every member of the profession it is sufficient to say that it is a *Lancet* publication.

The Ship Surgeon's Handbook. By Surgeon-Lieut. Commander A. V. ELDER, R.N.V.R. Published by Baillière, Tindall & Cox. 3rd Edition. *Price* 10*s*. 6*d*.

THE majority of students on leaving hospital find themselves standing upon the threshold of their careers without any definite plans for the immediate future, and to many of them the project of six of twelve months devoted to world travel before settling down in practice must make a very strong appeal. Indeed, such a voyage is probably one of the most constant dreams of the newly qualified. It is astonishing therefore that

so few of us actually embark upon our travels and see the world upon which we live. Probably the explanation lies in the fact that while absence of funds prevents our travelling as passengers, absence of knowledge as to ways and means prevents our obtaining employment on a liner in the capacity of ship's surgeon.

It is to supply the latter need that *The Ship Surgeon's Handbook* has been offered to the profession, and we have much pleasure in commending it to our readers. In its 500 pages will be found everything that anyone could wish to know about the life of the ship's surgeon in all its aspects. The book opens with a discourse on the choice of a ship, and information is given about the various shipping companies that employ doctors. Other chapters deal with uniform and outfit, drugs, instruments and appliances, the relation of the doctor to crew, company and passengers, fees, etiquette and customs, and outlines and limitations of treatment at sea, including a detailed and valuable dissertation on that ancient and distressing malady—seasickness.

This little book cannot fail to entertain and help those who contemplate a voyage to any part of the world in any kind of ship.

The Invert and His Social Adjustment. By "ANOMALY." Published by Baillière, Tindall & Cox. *Price* 5*s. net.*

THE average man cannot help noticing in his ordinary way of life individuals who affect unusually cut clothes and feminine colours, and may or may not regard them with good natured tolerance. If he has a knowledge of physiology they are of some interest inasmuch as they present a problem of endocrinology, but their inner mental difficulties are quite outside his ken.

The book in question, which substitutes for the term pervert, which is usually applied to these unfortunate people, the more kindly, less stigmatising term invert, is a frank and excellently well balanced discussion of the obstacles which confront the homosexual and offers the mature advice of one who has surmounted the difficulties and attained peace of mind and self respect.

The book is written by a layman, but is refreshingly free from the pseudo-scientific attitude that usually characterises the attempts of amateur psychologists. The author states unaffectedly his case without jargon and presents practically the means whereby he has controlled a raging stream —diverted into the wrong channel.

To the average student this book is perhaps unnecessary during the pre-examination time, but to the practitioner who deals in more than the mere mechanisms of his patients it cannot fail to be of value, for he must at some time be consulted by a patient of this type. To those who are afflicted this book offers the great physic of Hope.

Surgical Instruments and Appliances. By HAROLD BURROWS, C.B.E., F.R.C.S. Published by Faber & Gwyer. 5th Edition. *Price* 2*s.* 6*d.*

THIS book comprises a series of lists in which are set out the instruments required in the commoner operations of surgery and gynæcology. To the names of the instruments are appended appropriate illustrations, so that one is reminded of certain so-called short courses in foreign languages.

The theatre sisters of our immediate acquaintance seem so uncanny in their efficiency that, in spite of its dedication, we should never dare to recommend this work for their perusal. "Where," they would say, "is Mr. So-and-So's needle holder; moreover, the rusty rougine which makes bone surgery possible for Mr. Blank is not even mentioned," and so on. There may perchance be surgeons without idiosyncrasies, or even an inefficient theatre sister or two, but we doubt it.

Another less obvious use of this little volume suggests itself. With a surgery or midder viva in view a half-hour spent skimming through its hundred and odd small pages would assure at any rate an adequate knowledge of instrumental shapes and names.

Medical Electricity for Students. By A. R. T. BROWNE. 2nd Edition. Published by Oxford University Press (Milford). *Price* 12*s.* 6*d.*

THIS is a useful book for the student masseuse. There is, however, a tendency to treat with brevity points which students themselves find difficult. This is probably because it is realised that here the personal factor is essential to a successful explanation. Especially disappointing are the paragraphs on the motors and rotary convertor.

In the chapter dealing with ultra violet light, the wisdom of the author in stating times of exposure for different lamps must be called into question, for it must be remembered that the type of lamp is not the only factor to be considered, there is also the available voltage, etc. A first exposure of about twenty minutes with some carbon arc units would produce a very severe erythema. In ultra violet light work, as in all other, too much emphasis cannot be laid upon the danger of undue haste.

A Shorter Surgery. By R. J. McNeill Love, M.S., F.R.C.S. Published by Messrs. H. K. Lewis & Co., Ltd. Price 12s. 6d.

A BOOK on Surgery containing under three hundred pages and yet omiting few, if any, of the essential details of the subject is a thought which must have passed through the minds of many students prior to their final professional examination. That such a thought could be turned into reality has, until recently, seemed improbable, but, any senior student who troubles to obtain Mr. Love's excellent little book will find therein a mine of useful information.

The book is essentially for the senior student and especially for the man up for his final. A brief survey of this book, just prior to that eventful day, will do much to inspire the candidate with confidence by refreshing, in a short time and with the least possible amount of energy on his part, those points on which his memory is somewhat hazy.

For the junior student the book is of doubtful value and, if used at all, should be used in conjunction with one of the many excellent larger text books on the subject.

In a book of this size no attempt has been made to cover the whole field of surgery, but rather emphasis has been laid on those points which will be useful for examination purposes. Thus barely five pages are devoted to the subject of fractures, while ophthalmic surgery is not even mentioned.

The sections dealing with the diseases of the bones and joints are particularly good, being well illustrated and very clearly written. They are extremely useful for reference, when working in the Museum.

The diagnosis and treatment of the various forms of hernia are described very fully and this chapter is extremely instructive. Due emphasis is laid on the dangers of employing too rough manipulative measures, but, at the same time, if possible, reduction should be procured and operation performed at a later date.

The work is well illustrated with some forty-three pen and ink illustrations and thirteen plates, mainly consisting of photographs of museum specimens.

The book is to be recommended as a useful addition to the library of the senior student.

Sport.

Golfing Society.

ON Wednesday, July 20th, we played our first fixture with Sidcup. Although up against a strong side, we were rather unlucky to lose by 3 matches. The games were well contested and it is hoped to be able to arrange a return fixture later in the season.

Whitworth was unlucky to lose his match, but at the last hole a sudden desire of gardening overcame him, thus allowing his opponent—who now gardens only at home—to win the hole and the match.

Pye-Smith could only blame his driver, but his recoveries were characteristic of his true fighting spirit. Lomax had his own ideas as to the planning of the holes, but we understand his practice and suggestions will not be further considered.

Hankey was at a great disadvantage in having some local knowledge, but he made up for it by a short and well delivered speech after supper, to which Mr. Hughson, who captained Sidcup, ably replied.

Results

Guy's		*Sidcup*	
K. Whitworth	0	A. J. Hughson (1 up)	1
E. J. Pye-Smith	0	F. H. M. Luker (4 & 2)	1
J. A. Jackson	0	W. M. Marchant (4 & 3)	1
P. H. Lomax	½	W. E. Wilson	½
O. Ive	½	G. Wallington	½
L. B. Langmead	0	R. H. Membrey (3 & 1)	1
E. C. Duffett (1 up).....	1	W. C. Willan	0
A. T. D. Gibbings (3 & 2)	1	C. J. W. Cowdy	0
G. T. Hankey	0	T. Sperring (7 & 6).....	1
	3		6

THE July Competition was held on Wednesday, July 13th, at West Kent. Owing to the course being very wet the returns were not very good. The rough gave little quarter to those who were unfortunate enough to try it, and several cards now lie buried as a result of such experiments.

Results

E. C. Duffett (12)	3	down
S. H. Croot (16).....	7	„
E. E. Evans	10	„

A return fixture has been arranged with the Shortlands Golf Club on Wednesday, September 7th, at West Kent.

Staff Match.

THE second Staff match was played at Sidcup on Wednesday, July 27th. Several of the Staff who had arranged to play were unfortunately forced to srcatch owing to the pressure of work.

A terrific rainstorm greeted our arrival and with amazing rapidity filled all the ditches, which later took heavy toll of both strokes and balls. Shortly after play had started, a second storm descended upon us, causing a general stampede to huts and woods. The remainder of the day, however, was fine and warm.

The results of the singles proved most interesting, the students having the lead by one match. A bigger margin was, however, obtained in the foursomes, and the match was finally won by the students by 10 matches to 6 matches.

After supper, Dr. Ryffel proposed a vote of thanks to the Sidcup Golf Club for allowing us the use of the course and for making such excellent arrangements for our well being after each round.

Results

Staff		*Students*	
Mr. Morgan	0	J. A. Jackson (5 & 4)	1
Mr. Knott (2 & 1)	1	H. J. Cotton	0
Prof. Johnston (2 up)	1	P. H. Lomax	0
Mr. Chapple (2 up).....	1	E. C. Duffett	0
Mr. Duffett (6 & 4).....	1	J. A. Vernon	0
Dr. Ryffel	0	L. B. Langmead (6 & 5)	1
Mr. Hughes (5 & 4)	1	R. Jarman	0
Mr. Jenkins.....	0	O. Ive (5 & 4)	1
Mr. Doherty	0	S. H. Croot (3 & 2).....	1
Mr. Owen	0	S. L. A. Clarke (6 & 5)	1
Mr. Eckhoff	0	G. T. Hankey (6 & 4)	1
	5		6
Mr. Morgan and Mr. Knott (2 up)	1	J. A. Jackson and H. J. Cotton	0
Prof. Johnston	0	P. H. Lomax and O. Ive (3 & 1)	1
Mr. Chapple and Mr. Doherty	0	E. C. Duffett and S. H. Croot (2 up)	1
Dr. Ryffel and Mr. Hughes	0	L. B. Langmead and K. Jarman (5 & 3)	1
Mr. Eckhoff and Mr. Owen	0	S. L. A. Clarke and G. T. Hankey (4 & 3)	1
	6		10

E. C. DUFFETT, *Hon. Sec.*

United Hospitals Sailing Club.

Inter-Hospital Regatta.

THE Annual Regatta of the United Hospitals Sailing Club was held at Fambridge on Saturday and Sunday, August 6th and 7th, and some excellent racing took place—both from the point of view of the competitors and of the boat builders. The latter have cause to rejoice in that, owing to a fresh breeze and racing canvas, two dismastings took place and a boom and two rudders were smashed.

Six hospitals—Guy's, St. Thomas's, London, St. Bart.'s, St. George's and Middlesex—each sent in a team of four for the Sherren Cup, and each hospital raced five times and drew five byes. In each race two rounds of a triangular course were sailed, the helmsmen changing after one round.

Dr. French, the Commodore, presided on the Saturday and, in spite of the anguished pleas of the competitors, succeeded in getting six races sailed off in what must be record time for any regatta.

On the Sunday Dr. Conybeare and Mr. McNair came down to hearten us with their presence.

In the seventh race Court and Wood did not hear the second gun, with the result that they were in a hopeless position when the starting gun went. The Committee allowed their appeal and the race was re-sailed. At the second start they had the misfortune, whilst rushing for the line, to be about three feet across it when the gun went, and were recalled. The ground thus lost was never regained and they finished third.

The last race having been sailed and the second dismasting having taken place in it, Guy's, Bart.'s and London were found to be level with nineteen points each, but as only two boats were sailable the deciding race had to be postponed.

In the final of the single-handed competition for the Wilson Cup, Wood was the only survivor from Guy's. After leading for the first round he lost the lead, owing to an error in tactics, to Watts, of Bart.'s, who won.

Race.	Crew.	Result.
3	Wood and Palmer	Won
4	Roche and Court	Second
5	Roche and Palmer	Won
7	Court and Wood	Third
9	Roche and Wood	Won

Swimming Club.

Guy's v. Grafton S. C.

IN the return match with Grafton at the Forest Hill Baths, on Friday, 8th July, the Hospital won 3—2 in a close and fast match. Throughout the season the Hospital side has shown it can do all things but score, and the fault lies in the shooting. The team spoils well, is fast and combines well, but always that inability to score handicaps them. Shots at goal consistently go over the top or fall into the goalkeeper's hands. What losses the side have suffered are due to this weakness and no other, and the cure lies in consistent practice at hard and fast shooting.

Defending the deep end in the first half, we found ourselves two goals down in the first few minutes and, having discovered that, we settled down to a hard game. J. W. H. Jones scored our first goal with a very fast shot and we crossed 1—2. Theis soon after scored and thus made the scores level. Hard play followed and Malone scored off a pass from O. M. H. Jones.

E. Evans showed promise as a goalkeeper and with more practice should make a very good one.

Guy's Team.—E. Evans; T. L. Kark, C. E. M. de Gouchy; C. D. Malone; S. E. Theis, J. W. H. Jones (Capt.), O. M. H. Jones.

Tennis Club.

1st VI v. House of Commons.

THIS match was played at Honor Oak Park on Wednesday, July 20th, and lost by 2 matches to 7.

Van den Broucque and Boyle—
Lost to Cazalet and Margesson 2–6, 2–6.
Lost to Harmsworth and Pethick-Laurence 4–6, 5–7
Beat Ganzoni and Lindsay 6–4, 6–3.

Arkles and Tupling—
Lost to Cazalet and Margesson 5–7, 2–6.
Lost to Harmsworth and Pethick-Laurence 4–6, 2–6
Beat Ganzoni and Lindsay 6–3, 6–3.

Lomax and Crombie—
Lost to Cazalet and Margesson 1–6, 1–6.
Lost to Harmsworth and Pethick-Laurence 1–6, 3–6
Lost to Ganzoni and Lindsay 7–5, 4–6, 2–6.

2nd VI v. Prof. Johnston's VI.

THIS match was played at Honor Oak Park on Wednesday, August 3rd, and was won by the Staff after a thrilling struggle by 5 matches to 4. The feature of the match was the play of our visitors' third pair, which, although lacking the success it deserved, nevertheless was reminiscent of the Centre Court. Adorned with bandeau which matched their dress they gave an example of play which aroused unstinted admiration from the many spectators present. The powerful drives of Eckhoff, so often only inches outside the court, greatly contrasted with the electrifying play of the Dean at the net. Never has that article suffered so consistent a bombardment. We felt worried until reassured that the Clubs' Union would grant us six new nets again next season.

Mr. Lambrinudi and Mr. Howitt, as second pair, seemed bent upon rescuing their side from the disaster which was tending to overcome it. They played extraordinarily good tennis, and only lost their last match after a hard fight.

Neely and Pearson were far too good for us, and did much towards the overthrow of the home forces. The results were as follows:—

Arkles and Hollis—
Lost to Neely and Pearson 6–4, 7–9, 4–6.
Lost to Mr. Lambrinudi and Mr. Howitt 4–6, 4–6.
Beat Prof. Johnston and Mr. Eckhoff 6–2, 3–6, 6–3.

Kurtz and Booker—
Lost to Neely and Pearson 2–6, 6–3, 0–6.
Lost to Mr. Lambrinudi and Mr. Howitt 6–8, 5–7.
Beat Prof. Johnston and Mr. Eckhoff 7–5, 1–6, 6–1.

Gaitskell and Housden—
Lost to Neely and Pearson 4–6, 5–7.
Beat Mr. Lambrinudi and Mr. Howitt 6–4, 2–6, 6–4.
Beat Prof. Johnston and Mr. Eckhoff 6–4, 6–1.

Birth.

WILSON—On August 17th, 1927, at "Carisbrooke," Plymouth, to Vera, wife of Edric F. Wilson, F.R.C.S. Eng.—a daughter.

EDS. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *September 10th, 1927.* *Number 1021*

PASSIM

IT is always a hard task to make our conscious selves believe those things which, although our subconscious minds tell us must be true, are distasteful to us. We fight grimly against the ever-increasing conviction that it "must be so," and seek untiringly for any straw on which our waning hope may find support. We have been fighting such a battle during the last two weeks. At first we seemed we must be successful. Our calendar told us that still the month of August was here—that time when we swelter in the heat of the sun, when the newly-sown grass in the park gives up for want of moisture, and when the Out-Patient Department becomes one large incubator for the proliferation of the *genus pediculus*. "How, then," we asked, "could this awful dread be actual fact?" But we have capitulated. No longer does our calendar bid us pack our bag and take our holiday, but now, in large letters, tells us that winter is approaching. Yes, it must be true—*Summer is dead.*

So, removing the moth balls from our winter garments, we hastily put them on preparatory to shivering at the Hospital. "Could we have been right after all," we meditated as we made our way to our suburban station. The sun shone brilliantly, while the thermometer outside our local bookshop told us that Summer Heat was being approached with great rapidity. The compartment in which we travelled seemed more odiferous than usual. A cold sweat moistened our brow. We were sorely afraid that after all our subconscious self had been wrong.

But our fears were soon removed. For the Hospital was once again a hive of industry. Once more the Colonnade was filled with the surgical firms waiting for their chiefs; no longer did a hastily written notice inform us that Dr. —— would not teach in his wards that day. Neither need we hie to the theatre balcony for our afternoon nap for the Library was no longer closed for the purposes of cleaning. Once more the Medical School was filled with the odour peculiar to its upper storeys.

Fully awake at last to the fact that we have had our summer season we feel that this would be an apt opportunity for us to make some small review of the chief events of those months.

On June 9th the Annual Garden Fête was held under the auspices of the Ladies' Association. This was eminently successful and nearly £2,000 was raised on behalf of the Hospital funds. On July 8th the Centenary of the publication of Bright's *Medical Cases* was celebrated. This was the occasion of a brilliant oration on "Richard Bright: The Man and the Physician," which was given by Prof. W. S. Thayer, M.D., of Baltimore.

The new Electrocardiagraphic Department, which is situated at the top of the Medical Block and with which is associated the Hunt Memorial Library, has been in full swing during the whole of the summer under the charge of Dr. Campbell.

To revert to the athletic side of the Hospital, Guy's have once more demonstrated that they are a great power in Inter-Hospital sport. The Cricket Cup is once more in the Spit, together with the Tennis Cup, Rowing Cup, Athletic Shield, the Shooting Cup and the Swimming Cup. This, we feel, is a record of which the Hospital may justly be proud and it is to be hoped that we shall have as equal success in the Inter-Hospital contest during the winter.

THE cause for the upheaval in the Medical School Office during the month of August has now been ascertained. We hear that the interior

of the Dean's sanctum is being completely renovated. This consists of oak panelling to the walls and complete refurnishing. Two powerful electric globes are also being installed to replace those which have lighted the darkness of many past heads of the Medical School.

We have had complaints that Obituary Notices of old Guy's men rarely appear in the Gazette. We feel that we are not entirely to blame for this and would greatly appreciate a short obituary from the relatives or friends of any Guy's with the notification of his decease.

Mr. L. S. Williams has been elected President of the Residents, and Mr. R. C. Brock Vice-President, on the retirement of Mr. C. W. Marshall and Mr. E. H. Roche.

The following House Appointments have been made :—

House Physicians—

To Dr. French, Mr. E. J. Pye-Smith.
Dr. Poulton, Mr. F. J. T. Sale.

House Surgeons—

To Mr. Fagge, Mr. S. R. Trick.
Mr. Turner, Mr. E. D. Y. Grasby.

Out-Patient Officers—

Messrs. S. L. A. Clarke, E. T. Clifton, C. B. Picken, S. C. H. Lane.

Assistant House Surgeons—

To Mr. Hughes, Mr. W. Leslie.
Mr. Davies-Colley, Mr. W. R. C. Spicer.
Mr. Bromley, Mr. S. Carnofsky.
Mr. Slesinger, Mr. E. Clayton-Jones.
Mr. Ogilvie, Mr. A. B. Kettle.

Ophthalmic House Surgeon—

Mr. N. H. Allen.

Obstetric Resident—

To Mr. Chapple, Mr. J. G. Weston.
To Mr. McNair and Mr. Cook, Mr. E. H. Roche.

Ear, Nose and Throat House Surgeon—

To Mr. Layton, Mr. F. G. Parker.

Genito-Urinary and Orthopœdic House Surgeon—

Mr. J. M. Turner.

We offer our congratulations to Mr. C. Hall and to Mr. C. G. Walmsley on obtaining the Degree of Bachelor of Dental Surgery of the University of London. It is pleasing that the first two men to obtain this Degree were both Guy's men.

It is with deep regret that we have to announce the deaths of the following old Guy's men :—

Mr. R. L. Down, L.D.S., of Buckingham House, Buckingham Street, W.C.2.

Dr. Arthur Percy Allan, of Crogdene, Croham Road, South Croydon, on Friday, September 1st. Dr. Allan qualified M.B., B.S. in 1894 and took his M.D.Lond. four years later.

Dr. John Edward Hocking Parsons, on Sunday, August 21st, at Theobald House, Rochester, Kent. Dr. Parsons qualified in 1899

The Functions of the Stomach.

A Paper read before the Guy's Hospital Physiological Society by Mr. D. B. SMALLSHAW.

Mr. Chairman and Gentlemen,—I have chosen for the title of my Paper to-night "The Functions of the Stomach." This title was selected long before I began to write the Paper, and this must be my excuse for employing a title so vague and yet so comprehensive. In the course of a short paper I can hardly hope to do more than touch the fringe of so wide a subject.

I suggest that before we proceed to a consideration of the behaviour of the stomach, we consider very briefly its anatomy. I do not want to enter very minutely into the structure of the stomach.

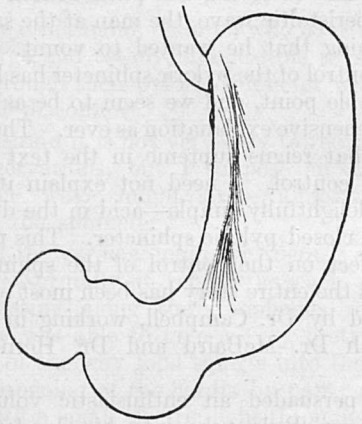
The stomach is a muscular organ designed to prepare food for its reception into the small intestine. Its position in the abdomen in health varies within quite considerable limits, and seems to bear some relation to the build of the individual. Thus, in the vigorous athletic individual, with the wide epigastric angle, the stomach is situated higher in the abdomen than is the case in the individual who leads a sedentary life, whose physique and general muscular development is often poor, and whose epigastric angle is narrow. As I have just said, this variation in position to health is very considerable. Thus, a person, the most dependent part of the greater curvature of whose stomach is 2 inches above the level of the iliac crests, may be as normally healthy as the person whose greater curvature is 4 inches below the crests. The position of the stomach may indeed vary in the same person from time to time

During the X-ray of a normal healthy individual someone was careless enough to bang a door, with the result that the individual under observation was so startled that his stomach actually dropped four inches !

As you are all aware, the wall of the stomach is composed of four coats—a serous (derived from the peritoneum), a muscular, a subcutaneous and a mucous membrane.

The muscular coat itself consists of an inner (oblique layer), a middle (circular layer) and an outer (longitudinal layer) of plain muscle fibres.

In this muscle coat it is the inner oblique layer to which I want particularly to draw your attention this evening. I have attempted to draw it for you and give you some idea of where it is situated.



The oblique layer really consists of two bands of muscle fibres running down, one on either side of the lesser curvature, stretching from the incisura cardiaca above to the beginning of the pars pylorica below.

Each of the bands is continuous with the circular layer of the œsophagus. In their upper part they are quite free; they are not attached to the muscle beneath them, and a probe could be pushed under each of them. At their right margin each of these mingles over the body of the stomach with the circular coat. Their left margins are free and well defined.

These bands are described most carefully by Jefferson, and in doing so he postulates the existence of a gastric canal as is found in the stomach of ruminants, bounded on either side by these two bands.

The ruminant possesses four stomachs, the first two of which—the rumen and reticulum—it uses for the storage of food until such time as it feels inclined to regurgitate it back into its mouth, where it can chew it at its leisure. The soft bolus is then passed down into the third and fourth stomachs and thence into the duodenum. Thus, the ox is able to pass food directly from its mouth into its third stomach by means of longitudinally running fibres, which form a gastric canal, and which can approximate the orifice of the third stomach to the end of the œsophagus. This canal varies in completeness in different animals, but is a most important structure in the stomach of the ruminant. By means of it the animal can pass liquids directly into its third stomach, and is of particular use to the young when still suckling.

Cohnheim has investigated the dog's stomach, in which no sign of a gastric canal is visible, and he has discovered that liquids can pass directly to the pyloric end of the stomach without mixing with the food already present in the stomach.

Colin has definitely demonstrated the same phenomenon in the horse, which, like the dog, does not possess a gastric canal visible on dissection.

Lewis, in describing a canal along the lesser curvature of the human fœtal stomach, says:

"It follows the lesser curvature, appearing as a groove when seen from the inside of the stomach. It suggests a continuation of the œsophagus split open towards the gastric cavity . . . an open canal which . . . may become a tube during its physiological activity, by the approximation of its lips."

To support the theory that liquids tend to flow along the lesser curvature of the human stomach rather than to spread out over the whole of its surface we have the post-mortem evidence that in people who die through swallowing corrosive fluids it is the mucous membrane along the lesser curvature that is most affected.

The middle circular layer is uniformly spread out over the whole extent of the stomach. Its fibres are most abundant in the region of the pylorus, and there form a ring—the pyloric sphincter.

The longitudinal layer is the most superficial layer, and is arranged in two groups. The one group of fibres is continuous with the longitudinal fibres of the œsophagus and end proximal to the pyloric sphincter. The other division begins in the wall of the stomach, and its fibres are most numerous as it approaches the sphincter. Some of the deeper fibres blend with the fibres of the middle circular layer and help to form the pyloric sphincter.

The mucous membrane of the stomach I will refer to when we consider the secretory functions of the stomach.

I have already stated that the stomach is so designed that the food entering the small intestine

is already more or less prepared, so that the pancreatic juices may readily complete the changes it must undergo before its absorption in the small intestine.

In the light of disease it is probable that it is the motor activity of the stomach that is the more vitally essential in this preparation, and therefore of greater importance than is the enzyme action that takes place within the stomach. From the ordinary text book we perhaps get an exaggerated idea of the importance of this enzyme action; a lot of work has been done on it and much space is devoted to it. As I shall mention later, there are many people into whose stomach no secretion takes place. These people are usually healthy and do not suffer from gastric complaints. I do not refer to those who have a malignant growth of the wall of the stomach, but to that 4 per cent. of normal healthy individuals who have apparently a congenital achylia. In contrast to these people are those suffering from a leather-bottle stomach, in which there is no muscular activity, and who waste away with extraordinary rapidity.

I propose therefore to deal next with the motor activity of the stomach.

We have already noted that the position of the healthy stomach in the abdomen varies with the build of the individual, and to the picture of the vigorous, athletic, broad-chested man, with the broad epigastric angle, we can add a hypertonic stomach with a test meal curve that shows hyperacidity. Barclay has, however, shown that peristalsis does not vary directly with the muscular tone of the stomach, and that the rate of emptying is apparently quite independent of the state of tonus of the stomach. The rate of emptying for the healthy stomach varies with the consistency and nature of the meal given. Thus, two-and-a-half hours is the normal emptying rate in the case of the fractional test meal, which consists of thin gruel. With the bismuth meal given for X-ray investigations, the normal stomach should show no trace of bismuth after six hours, and will probably empty in under five hours.

But the motor activity of the stomach is concerned not so much with the rate at which the stomach is emptied as with its effect on the recently swallowed food.

The entrance of food into the stomach stimulates peristalsis. Waves of contraction of the muscular wall begin in the middle of the stomach and slowly move towards the pylorus, increasing in depth as they approach it. About one inch from the pylorus the wave is so deep that part of the pyloric vestibule becomes almost completely separated off from the rest of the stomach. By means of this the food is forced towards the pyloric orifice through which some of it passes, the remainder returning into the body of the stomach in an axia[1] stream.

Various factors seem to influence the depth of the waves, but the vigour of these peristaltic waves does not seem to bear any relation to the normal tone of the stomach.

They vary with the position of the individual—they are more complete when he is lying down.

They are stimulated by the presence of hydrochloric acid.

And, finally, the nearer they start to the fundus the more of the pyloric end of the stomach they shut off and the greater the tension put on the muscle fibres in the neighbourhood of the pyloric sphincter.

Dr. Ryle quotes a case in which it was possible to see visible peristalsis owing to pyloric obstruction. While observing this phenomenon he noted an anti-peristaltic wave, the man at the same time complaining that he wanted to vomit.

The control of the pyloric sphincter has long been a debatable point, and we seem to be as far from a comprehensive explanation as ever. The popular theory that reigns supreme in the text books is the acid control. I need not explain it to you, it is so delightfully simple—acid in the duodenum means a closed pyloric sphincter. This may have some effect on the control of the sphincter, but that it is the entire story has been most effectively disproved by Dr. Campbell, working in conjunction with Dr. McBaird and Dr. Hern here in Guy's.

They persuaded an enthusiastic volunteer to swallow one Ryle tube into his duodenum and another into his stomach. They then gave him 200 c.c. decinormal hydrochloric acid and drew off samples through both the gastric and duodenal tubes. The stomach emptied very rapidly—it only took a few minutes—yet the duodenal contents showed N/20 hydrochloric acid.

Again, those 4 per cent. of normal individuals who have a complete achylia, with no acid secretion into the stomach at all, can apparently control their pyloric sphincter quite perfectly.

Apperley has suggested that the stomach only begins to empty when its total chloride value approaches that of the blood value. This theory is, however, open to some grave objections:

(1) It does not explain why water and other fluids pass so quickly from the stomach into the duodenum without having the time to take up the necessary amount of chloride, and

(2) We know that glucose is absorbed in the small intestine, not in the stomach, yet the blood sugar will rise as quickly after a meal of glucose only as it will after a meal of glucose mixed with chlorides. In both cases the glucose must have reached the small intestine.

Personally, I am more satisfied with Haneborg's contention that the pylorus tends to open automatically as each peristaltic wave reaches it. It seems to me that delayed emptying is not due so much to a spasm of the pyloric sphincter as to an achalasia of the sphincter—that is, a failure of the sphincter to relax. What the stimulus is that causes this failure of relaxation it is hard to decide. The nature and consistency of the food reaching it seem to have something to do with it.

An interesting observation is made by X-rays. A normal individual swallowed a meal of bread soaked in milk, with some hard pellets made by drying a mixture of water starch and bismuth amongst the bread. As each peristaltic wave passed along the stomach the pyloric opened, but as soon as one of the pellets approached the orifice it failed to open.

On the other hand, children who have swallowed quite large and totally undigestible toys can pass them through their pyloric sphincter without any apparent discomfort.

I am afraid it is not very easy to reconcile these two observations, but I suppose an extra deep peristaltic wave might drive almost anything through the sphincter !

About the cardiac sphincter there is very little to say. Normally it relaxes as each peristaltic wave passing along the œsophagus reaches it. Dr. Ryle was able to give a very pretty demonstration of the way food squirts into the stomach at each opening of the cardia by passing a cystoscope with a small electric light through a gastrostomy opening.

There is a very interesting condition termed by Dr. Hurst achalasia of the cardia, in which the patient complains of the length of time it takes him to have his meals, and the way the food seems to " stick " on its way to the stomach. This condition has been ascribed to a spasm of the muscles controlling the cardiac sphincter, but Dr. Hurst regards it rather as a failure of the muscles to relax.

My excuse for mentioning this condition is to give me an opportunity of telling you of a very interesting case of a boy aged about 16 years who came up to Dr. Ryle's Out-Patients for difficulty in swallowing and complaining of the length of time he had to take over his meals. An hour spent over breakfast was a comparatively short time. Dr. Ryle diagnosed achalasia of the cardia, and this was confirmed by X-rays, which showed a wide dilated œsophagus with the barium held up at the cardia. For some time the boy was treated as an out-patient, without any improvement in his condition, when one day he came to Dr. Ryle with the announcement that he had been cured. This cure might really be termed a miracle. He had been to a country fair and had attended a laying on of hands, and from that moment his difficulty in swallowing disappeared. The sequel, however, is also very interesting. He was again X-rayed and the plate was identical with the previous one. This, of course, suggests that the disease is hysterical mainly, and it is rather interesting to compare the behaviour of the two sphincters guarding the entrance exit from the stomach. So far as I know, there is no organic factor which upsets the mechanical working of the cardiac orifice, whereas, as we have already seen, the factors controlling the pyloric orifice are both numerous and obscure.

And now we come to the consideration of the sensory functions of the stomach. Can the stomach itself appreciate any sensation at all ? If so, what are the stimuli that it can appreciate ?

We must all have had the experience of swallowing a drink that is uncomfortably hot, and we cannot have failed to notice that the sensation does not persist. We can almost accurately define the level at which the discomfort ceases. We can feel it in the mouth, in the throat, and travelling down behind the sternum, and then it suddenly ceases. And we might therefore not be surprised to find that the stomach and œsophagus respond differently to thermal stimuli.

From the example I have just described it might appear that the stomach can appreciate no thermal sensations. Sir James Mackenzie would have us believe that the œsophagus cannot either, and that the sensations of hot or cold experienced in the epigastrium after drinking hot or cold fluids is due to reflex vascular changes in the skin over that area. He believed the skin to be the seat of the sensation. If, however, one puts a lump of ice on one's epigastrium and then drinks some iced water it will be possible to differentiate between the two sensations produced. One is distinctly deeper than the other.

Dr. Hurst, in his Goulstonian Lectures, conclusively demonstrated that the human stomach is insensitive to both thermal and tactile stimuli. In his experiments he made use of a patient who had had a gastrostomy performed—that is, a person who had had a permanent fistulous opening made into his stomach for the purposes of feeding, following a stricture of the œsophagus. The individual was blindfolded and thermal stimuli was applied to the gastric mucous membrane. He was quite unable to appreciate any sensation of hot or cold, but when alcohol was poured through the fistula he described a burning sensation felt in the stomach.

No sensation was appreciated either when the mucous membrane was squeezed or pinched, or when 0.5 per cent. hydrochloric acid was sprayed over it.

Dr. Hurst therefore concluded that the stomach was sensitive to alcohol, but not to thermal, tactile or chemical stimuli.

Although some of the earlier observers had suggested that the stomach was unable to appreciate these stimuli, they went off the track by assuming that it was therefore insensible to all stimuli.

Lennander believed that it was the parietal peritoneum and the subserous connective tissue in which the sensation of pain originated, and that it was due either to their becoming inflamed or to traction by the gut on them.

Sir James Mackenzie agreed with Lennander in believing that it was the subserous connective tissue that was so sensitive, but he did not consider that pain only occurred when actual inflammation was present. He believed that the pain was due to an irritable focus in the spinal cord, and that therefore all pain was referred to the somatic tissues and true visceral pain was non-existent.

Ross, in 1888, was the first to postulate the presence of both visceral and referred pain, but it was left to Dr. Hurst to offer a suggestion as to how this visceral pain originated.

Dr. Hurst was the first to suggest that the stomach might have a special sensibility of its own and that it might appreciate only an adequate stimulus, just as the eye only appreciates light, the ear sound, and so on.

The adequate stimulus is shared by the other hollow viscera and is a peculiar form of muscle sense—depending on the " tonus " or " posture " of the individual muscle fibre. As the tonus of the gastric musculature varies, so do we experience appetite, satisfaction and repletion.

If, now, we look upon visceral pain as caused by an exaggeration of the same factors that call forth these normal sensations, Dr. Hurst provides us with an excellent explanation of gastric pain, both visceral and referred. The tension on the individual muscle fibres is the actual cause of the afferent impulses which call forth the sensation of pain in the viscus, as well as the associated reflex symptoms of tenderness and rigidity in the corresponding segment of the rectus abdominis muscle.

It is obvious that the interpretation by one hollow viscus of its state of posture may differ from that of another whose muscular tonus is the same. Thus, in the rectum or bladder emptiness means comfort, while in the stomach comfort and satisfaction are synonymous.

Dr. Ryle has defined satisfaction as the state of " no sensation " occurring when the stomach walls are adequately relaxed so as to enclose or grasp a meal of appropriate bulk and consistency and its muscle fibres have assumed a normal or average posture.

The usual slow intake of food into the stomach does not necessarily increase the intra-gastric pressure. It will remain between 4 and 6 mm. mercury whether the stomach contains 5 or 500 c.c. food. Dr. Hurst tested the effects of a sudden increase in this pressure by means of a balloon connected to a manometer. If the balloon was rapidly inflated a sensation of fullness was experienced when the intragastric pressure had risen to about 12 mm. Mercury. After about 20 seconds the intragastric pressure fell by about 2 mm. and the feeling of fullness disappeared. This was repeated four times.

This leads us to the question of how does the stomach adapt itself to the food it receives?

Müller found that the length of the muscle fibres in the filled stomach of a frog was only two to three times that of the fibres in the empty contracted stomach, yet the circumference of the former was five times that of the latter.

It was obvious therefore that the adaptation of the stomach wall to its contents could not be accounted for merely by an alteration in length of individual fibres. Another explanation must be sought for.

Continuing his investigations Müller then found that the fibres in the contracted stomach were in 15–20 layers, whereas those in the full stomach were in only 2–3 layers.

We thus have two methods by which the stomach may adapt itself to increased pressure. The individual fibres may lengthen and thus increase the gastric volume, or the fibres may rearrange themselves as Müller describes. Dr. Hurst believes that the adequate stimulus for such a rearrangement is that tension on the fibres which gives rise to a feeling of repletion. The fibres first of all lengthen to their maximum and then, if still more food is pressed into the stomach, the fibres undergo a rearrangement.

And this leaves us with only the secretory functions of the stomach to consider.

The stomach is lined by an elastic mucous membrane, which on being examined with a lens is seen to be covered by a number of depressions—the openings of the ducts of the gastric glands.

These glands are of three kinds: The pyloric, the fundic and the cardiac.

The pyloric glands, as their name suggests, are situated chiefly in the neighbourhood of the pylorus. They are said by Heidenheim to secrete an alkaline fluid which contains some pepsin. According to Edkins and Starling they form a substance capable of acting as a chemical excitant to the glands secreting the gastric juices. This substance they term gastric secretin or gastrin.

The fundic glands are situated over the remainder of the stomach, being most numerous in the pre-pyloric region. The epithelium of these glands is composed of two types of cells—the chief or central cells and the parietal or oxyntic cells.

It is the function of the central cells to produce the digestive enzymes of the stomach, while the parietal cells, which are absent in the pyloric region and scanty near the fundus, produce the hydrochloric acid.

The main constituent produced by the central cells is the enzyme pepsin, which can be extracted from the gastric mucous membrane with glycerine. It is an enzyme that acts in acid medium at an optimum temperature of 37–40° C., and is probably secreted by the glands in the middle of the stomach, as well as by those at the pylorus. By it protein digestion may be carried as far as peptone before the food is passed on into the small intestine.

Some people consider that rennin is secreted into the human stomach owing to the power of the gastric juice to clot milk. Pepsin is capable of this function, and it seems to me quite unnecessary to postulate the presence of a specific enzyme for this purpose. I think I am right in saying that the gastric juice of many animals who never feed on milk is capable of this function. Surely they would not produce rennin in their gastric secretion ?

How the hydrochloric acid is secreted in such concentration by the parietal cells is not fully understood. Harvey and Bensley have suggested that the parietal cells secrete a chloride of an organic base, and that this compound yields free hydrochloric acid on reaching the mouth of the gland

It is an interesting fact that a reduction of the blood chlorides by special dieting will lead to the non-acidity of the gastric juice, and that if sodium bromide be taken in place of the more usual chloride, hydrobromic acid may appear in the gastric juice.

As I have already mentioned, there are 4 per cent. of apparently normal healthy individuals who have what Dr. Hurst contends is a congenital achylia, that is, from their youth up they have never had a secretion of gastric juice. Unfortunately, I have been unable to find any literature on this question, but I am told the glands are structurally normal.

At first sight this might not appear to be of any very great significance, but the gastric juice, by reason of its acidity, is an excellent bactericide. In some diseases—*e.g.*, Addison's anæmia—this achylia is a very constant factor and has led to the suggestion that the whole disease is due to an intestinal infection.

And this abnormal behaviour of structurally normal glands leads us to the control of gastric secretion.

Heidenhein has done a lot of work on the mode of secretion in the salivary glands. He considers that the secretion in such glands consists of two processes, one the production of the water and the inorganic constituents of the secretion, the other the production of the specific agents of the secretion, which we term enzymes. He considers that the nerves supplying a salivary gland are made up of secretory and trophic fibres.

The secretory fibres are those controlling the secretion of the water and the inorganic salts in solution in it.

The trophic fibres lead to the accumulations of the specific agents in the secretion. They themselves do not cause a flow of secretion, they merely cause its accumulation in the gland cells.

In view of Langley's work on the gastric glands, it seems probable that the same conditions will hold good in the stomach.

Langley found that during periods of fasting the central cells became packed with granules, which disappeared during digestion. These granules, he thought, must be zymogen granules.

For an understanding of the factors controlling the flow of gastric juice we are indebted to the work of Pavlov and his assistants.

His work was carried out on dogs. From the stomach he made a small diverticulum in direct muscular and nervous continuity with the stomach, but cut off from it by a diaphragm of mucous membrane. Into this diverticulum he made a fistulous opening.

The elaborate experiments he performed are known to everyone here.

You will remember that he found there were three factors controlling the secretion of the gastric juice;

A psychical or appetite secretion;

A secretion due to a secretagogue contained in some foods, and most particularly in Liebig's Extract; and, finally

A secretion due to a secretagogue formed during digestion.

Edkins suggests that the secretagogue causes the formation of gastrin, which is absorbed by the blood, by which it is carried round to the gastric glands and there stimulates a flow of gastric juice.

Pavlov found that bread put into the stomach of a sleeping dog produces no flow of gastric juice, whereas sham feeding with bread produces copious secretion. He concluded therefore that bread causes psychical secretion.

Pavlov also showed that it is the vagus which is responsible for psychical secretion. After section of the vagi all psychical secretion stopped and stimulation of the distal part of the divided nerve, by means of short induction shocks at intervals of 1–2 seconds, produced a flow of gastric juice after a latent period of 5 minutes.

Chronic Bronchitis.

A Lecture given by Dr. Marshall, in the Anatomical Theatre, Guy's Hospital.

GENTLEMEN,—We are going to talk to-day about chronic bronchitis, a very common malady which, as you know, affects people chiefly in the latter half of life, and is seldom seen under the age of 40. It causes a great deal of disability and depression, so that it spoils the latter part of the lives of a very large number of people of all classes of society. It is therefore a subject of very considerable importance from the medical point of view.

Bronchitis, as you know, means an inflammation of the mucous lining of the bronchial tubes, and in dealing with bronchitis we mean that we are dealing with inflammation of the larger tubes, that is to say, those of large and medium calibre. When it gets right down into the smallest tubes it is called bronchiolitis, which is always an acute affection. We leave that aside, and we are simply dealing now with inflammation of the mucous lining of the larger sized bronchi. Pathologically, we find swelling and hyperæmia of the mucous lining, and sometimes the inflammation spreads deeper into the submucous tissue. We get a great deal of serous secretion in the tubes, and actual pus formation, and, of course, an increase in the amount of mucus in the tubes. As regards the ætiology of the malady, it is due to infection. We get certain organisms in the secretion; pneumococci are nearly always present and streptococci are also frequently found.

Let us think about the defences of the respiratory tract. Why do people get bronchitis? When you come to think of it, it is rather surprising that they should get it, because the respiratory tract is so extremely well defended against infection. First of all, we have got a nervous mechanism which prevents the inhalation of gross particles. The reflex of the glottis prevents our inhaling foreign bodies, so that none of these can get down except by some accident. Sometimes a patient happens to get an overwhelming reflex when his mouth is full of food and he inhales some of it. We get people whose reflexes have been dulled by drinking slightly too well. Alcoholics are more subject to bronchitis than other people because of the way in which, as a result of alcoholism, the reflex becomes dulled as by general anæsthetics. Anæsthetics do not realise what an enormous amount of ill-health follows the inhalation of saliva and other things from the mouth during the course of a general anæsthetic. Cases of chronic bronchitis can be dated back to inhalations under an anæsthetic. When you are giving a general anæsthetic you should make certain that the head is in such a position that saliva will not drop back into the glottis. The head should always be kept lower than the shoulders. It is dreadful to think of people taking out tonsils with the head raised. An enormous amount of ill-health follows that. Bronchitis and bronchiolitis often follow operations of that kind. If the head had been kept low those affections would not have resulted. If the head is raised there is no way of preventing blood and saliva being drawn down into the respiratory tract. No blocking of the pharynx, and no aspiratory pump will prevent particles going down.

The mucous lining is formed of ciliated epithelium, and its ciliary action is driving particles upwards all the time. Secondly, it secretes mucus, and mucus is a very powerful antiseptic—it kills organisms. Thirdly, there is a free exudation which takes place in the mucous lining of the bronchial tubes; you get viscid fluid pouring out on slight provocation, and this stream of fluid is upwards and is continually being removed by cough. So that as long as you have got free movement of the chest it is very difficult to get chronic infection. But fluid which becomes stagnant does become infected. It is exactly the same as the analogy of the running water or the clear stream, and the still water or the stagnant pool. Stagnant secretions become infected, if moving freely they do not. So that there is a very important element to be considered in the mobility of the lungs. If the lungs are freely mobile it is rare to get chronic bronchitis; if, for some reason they are not mobile, then bronchitis is almost certain to follow from infection of the stagnant secretions sooner or later.

Let us think of the symptoms we get in chronic bronchitis. They appear generally in people rather above middle age. First of all, you get cough, which occurs during winter. In fact, chronic bronchitis is rightly called winter cough. That is because the mucous lining becomes hyperæmic in cold weather. If you watch the mucous lining of the bronchi when the body is exposed to cold you can see that it becomes hyperæmic. The patients will probably be town dwellers, because this affection is more severe in people who live in irritating atmospheres such as we get in London and other smoky towns. This winter

cough is always worse in the morning and during the night, and the patients cough up phlegm. When you ask them about the phlegm they tell you it is black. But you do not really see black phlegm. When you examine it you find that it is a greyish translucent material with numerous black particles; in other words, mucus in which are embedded little particles of carbon. That is the early stage. Later, when the cough becomes more severe and infection more advanced and you ask about the phlegm, they will tell you that it is yellow or green, and when you come to examine it you find that it contains pus cells. During the exacerbations of this chronic disease streaks of blood appear in the sputum. That is very common in chronic bronchitis because, as a result of the extreme hyperæmia of the mucous lining, a little blood may ooze from the inflamed epithelium. So much for the sputum.

When you ask about other symptoms you find that it is not so much the cough and the expectoration which bother the patients as a feeling of ill-health, especially in the matter of depression and loss of energy. They are very much below their normal capacity for work and for exercise. They suffer from shortness of breath on slight exertion. The shortness of breath and the loss of energy seem to be out of all proportion to the physical signs which you discover. Chronic bronchitis is a very disabling disease; it cuts down the patients' capacity for work and enjoyment to a surprising extent. They tell you that they have got a bad heart, that they cannot walk quickly, that they cannot go uphill without getting exhausted. You find nothing wrong with the heart, but only some signs of bronchitis, and they experience this shortness of breath and this feeling of exhaustion presumably because there is so much increase of secretion in the tubes that prevents the absorption of oxygen. They get all this serous mucous fluid in the tubes, and when the air is inspired and expired it forms a kind of froth in the fluid, and the fresh oxygen does not get right down into the alveoli. Oxygen is not very soluble in water, but carbon dioxide is, so that oxygen does not easily pass through the moist secretions to the capillary blood. Many of these patients, even with comparatively mild bronchitis, suffer from definite anoxæmia, not getting enough oxygen into their circulation, and that cuts down their capacity for exercise. The main symptoms therefore of chronic bronchitis are cough with expectoration, a greatly diminished capacity for exercise, and dyspnœa on the slightest exertion.

As regards the physical signs, they are not very striking in mild forms of bronchitis. When you examine the chest you will probably find that it is not moving freely. In an adult with a healthy chest the expansion ought to be about 4 inches. In a person with bronchitis it is seldom more than 2 inches. The chest looks normal in shape. The percussion note will be normal. With regard to auscultation, the breath sounds will be rather feeble generally. If we listen carefully we may hear moist râles. We also get a few rhonchi, but they are not very striking in ordinary cases. The voice sounds will be normal. Those are the ordinary physical signs you get.

As a rule bronchitis is associated with emphysema. In emphysema the chest is deep from back to front, the ribs raised permanently in the position of inspiration; resonance is increased, cardiac dullness is diminished, or absent, because the enlarged lung encroaches on the area of cardiac dullness. The breath sounds are altered. We get diminished air entry with emphysema. The expiratory sound is as long as the inspiratory sound, instead of being only one-quarter as long. Generally, we get signs of emphysema associated with signs of bronchitis.

We will deal with common sequelæ of chronic bronchitis. If the patients are not emphysematous before they get bronchitis—and many of them are—they will become emphysematous after they have had bronchitis for some years. In emphysema the alveoli become distended and the septa between them disappear, so we get large irregular cavities in the lung instead of regular fusiform air sacs.

The next stage is some softening of the walls of the bronchi as a result of the inflammatory process spreading into the submucous tissue. Then we get dilatation of the tubes.

As a result of the emphysema we get certain changes in the heart. The septa between the air sacs having disappeared, the capillaries on these septa disappear with them, and there are far fewer capillaries in the emphysematous lung than in the ordinary lung. The consequence is that the passage of blood through the lung is impeded, and an extra strain is put on the right ventricle. Then we get hypertrophy of the right ventricle. Later, the ventricle ceases to be able to deal with the increasing resistance. After a time the hypertrophied right ventricle is unable to keep pace with the increased work put upon it, and the ventricle dilates. We then get stretching of the ring which surrounds the tricuspid valve, and we get tricuspid regurgitation. The blood flows back into the right auricle, and the right auricle becomes over-distended, and the blood is held back in the vena cava. We then get engorgement of the liver, because the back pressure down the vena

cava causes overloading of the hepatic veins. We get a big engorged liver, and emphysema is the common cause of pulsating liver and tricuspid regurgitation. The patient then gets œdema of his legs, and he presents the common picture of right-side heart failure. Those are the common sequelæ.

We want to deal chiefly with treatment, because treatment is the part of medicine which interests the patient, and, obviously, it ought to interest the doctor. There are an enormous number of these cases, and they are dreadfully neglected. In the books you are told to give expectorants to people suffering from chronic bronchitis. Others say, "Give them a sedative." So most doctors give them a mixture of the two. That is not medicine, is it? That is a hopeless way of trying to cure cases of chronic bronchitis. Large numbers of these cases are curable. They are generally sent away. They are much better away from the irritating atmosphere such as we get in smoky towns. Large numbers of them winter on the south coast of France and the Riviera. The hotels there make fortunes out of the bronchitics who go there from this country, and many of them die there. It is not a good place to send patients with chronic bronchitis because you get sudden changes in the temperature there. These unfortunate patients often get bronchiolitis or pneumonia and die. That is not the way to tackle chronic bronchitis.

The way to tackle it is, first of all, to find out the cause of the disease. In large numbers of these cases you can find the cause, and if you deal with the cause you may cure the condition. The majority of these people develop bronchitis owing to structural defects in their chest wall. In the majority of cases you will find that the patients are emphysematous quite early in the history of their disease. They have got a freely mobile chest wall. They suffer from a hereditary affection which we will call congenital emphysema. It is not present at birth, but it develops in certain families very early. The rib cartilages ossify in these patients soon after the age of 30—much too early—and the chest wall becomes immobile. The lung moves so little that you get stagnation, and, as a result, infection of the mucous secretions, and these people become chronic bronchitics. You have got to try and keep these stagnant parts freely moving, and you can do do by teaching the patients how to expand their lungs and move their chest wall. You can increase the expansion of the patient's chest generally by over an inch by a course of expansion exercises, such as any of you can see in the Massage Department here. They are things you all ought to know in dealing with these patients. Emphysema can be largely checked by regular exercises. Keep the chest wall moving. If you do that, your patient's bronchitis will clear up in due course.

Let us take a patient who has chronic bronchitis and whom you find suffering from emphysema. First of all you want to reduce the irritation, and so you will send him out of London, not to the south of France, but to a much kinder climate. Send him to Madeira. If he is not very well off you can send him to the south-west coast of this country, where he will do almost as well—to Torquay or Penzance, where the climate is equable. You will tell him to take expansion exercises, and, if he does so, after a few weeks his bronchitis will be greatly reduced.

In the meantime you want to protect him against organisms which have got hold of this stagnant secretion. You will cultivate his sputum and have vaccine made from it. I am not a great believer in vaccines, because I do not think they are much good in the treatment of actual infection. On the other hand, they are invaluable as prophylactics against re-infection. If you can get your patient's bronchitis pretty well by climate and exercises, then you should give him a course of vaccine while the lungs are relatively normal. By repeating that course every spring and autumn you can keep the patient free from bronchitis for many years. I have had quite a number of patients who have been chronic bronchitics, and this course of treatment has quite cleared away the disease, and they have been able to go out even in fogs without developing further attacks. That is a common type of bronchitis. There are other types.

One reason why the defences of the respiratory tract get overwhelmed may be that there is some focus of infection from which organisms are streaming down the bronchial tree. The common sites for these nests of organisms are in the mouth, the throat, the nasal fossa and in the accessory sinuses of the nose. If you have a case of chronic bronchitis, always see that the mouth is clean. I see scores of chronic bronchitics with filthy mouths. The mouth must be kept perfectly clean, otherwise you will never rid the patient of his bronchitis. There are certain types of bronchitis which result from infections in the nasal sinuses. If you get a patient with chronic bronchitis who has a mobile chest, that is to say, who is not suffering from emphysema, then you may be pretty certain there must be some septic source which is overwhelming the defences of the normal respiratory tract. Very often a patient who has chronic bronchitis, and who is not emphysematous,

has his bronchitis chiefly in the upper lobes, while the ordinary emphysematous patient has it in the lower lobes. There are a certain number of patients who are not emphysematous, and when you examine them you find that the râles are chiefly in the upper lobes. All these patients have a septic focus about the nose or throat or sinuses. That has been my experience. I have not had any such case yet where I did not find the septic focus in one or the other of these sites, and the removal of the focus has completely cleared up the bronchitis. I could tell you of numbers of cases. They are important because since the signs are chiefly in the upper lobes, very often at the extreme apex of the lung, these people are supposed to have tuberculosis.

I remember a young butcher who was sent to me. For seven years he had been treated for pulmonary tuberculosis. He had been in sanatoria both in this country and in South Africa. His sputum had been examined scores of times, and tubercle bacilli had not been found. He had abnormal signs at the apex of one lung, coarse râles and slight impairment of resonance. I did not think he had phthisis. We got his sputum again and injected it into a guinea pig, but the guinea pig did not develop tubercle. The patient had definite obstruction on one side of the nose, and there was pus in the posterior part of the nasal fossa on that side. Mr. Layton did some sort of operation which relieved the obstruction and that patient became well.

Another case was a doctor's wife. I was asked to see her because she had cough, expectoration, pyrexia and "signs of advanced pulmonary tuberculosis." When I came to examine her she was a fairly healthy-looking woman. But she did have most alarming coarse râles over one open and upper lobe. Resonance was normal. I did not think she had got phthisis. Her symptoms were chiefly lack of energy and shortness of breath. We put her sputum into a guinea pig, and again the guinea pig did not develop tuberculosis. To make a long story short, she had got an infected antrum and rhinitis. Mr. Hastings opened the antrum and had it washed out. In a few months all her signs and symptoms disappeared, and she has been perfectly well ever since. Remember, therefore, that a sinus diseased is quite a common cause of chronic bronchitis, and very often will produce bronchitis, chiefly in the upper lobes.

In many cases bronchitis results not from fixation of the chest wall, but from lost elasticity in the lung itself. We get such a condition for instance after empyema, years after an operation for that condition. Most of the lung has never become freely movable again, and the pleura has become thickened, so that secretions stagnating there have formed a breeding ground for organisms, and bronchitis has developed in that part and spread to other parts. Again, you have to try and get the lung movable by expansion exercises, and you will probably find it wise to get a vaccine made to prevent relapse after you have got the condition nearly cleared.

Bronchitis, of course, is very common in persons who suffer from pulmonary tubercle. In chronic forms of pulmonary tubercle the bronchitis causes much disability. We send such persons therefore to warm and equable climates—islands—where the land is immersed as it were in a water bath.

There are certain drugs which are used. One of the great disabilities of bronchitis is that they cannot sleep at night because of the cough, and it certainly is wise to give them mild sedatives to induce sleep. You can give them linctus codeinæ in equal parts and in a 2 drachm dose to induce sleep. You can give them linctus every time they wake up.

As regards expectorants the best one is potassium iodide in 10 grain doses. You ought to give the expectorant if the secretion is thick and cannot be coughed up easily.

An antiseptic inhalation sometimes helps the patient. You can give creosote in capsules by the mouth. If you give creosote in a capsule you want to be careful to put it in a proper capsule, that is to say, in the keratin capsule which is made in one piece. That is not the best way to give the creosote. You do not want to poison the alimentary tract, but to get the creosote into the lungs. Obviously the best way is to inhale it. The method chiefly given in the books is the creosote chamber, but it is too inconvenient for general use. We get just as good results by the Burney Yeo inhaler. With the latter you do not get anything like the same concentration of vapour, but you can keep it on for a much longer time.

Creosote is not a volatile substance, so that we have to mix with it something that is volatile. We mix spirits of ether with it, and many people also put in some tincture of iodine because that is likewise a good antiseptic in the respiratory tract. You mix these in equal parts and you put 10 drops of the mixture on a pad and let the patient inhale it for periods of 2 hours several times a day. It is very striking to see the diminution in the quantity of sputum and the subsidence of pyrexia which often follows this treatment.

Health Notes.

By a Surgeon Dietist.

(Owing to the ruling of the General Medical Council on advertising, the author's name cannot be disclosed. Suffice it to say that he resides in the best squares, moves in exclusive circles and lives on oval lettuces, from which all the caterpillars have been painlessly extracted.)

BLOOMING health is every man's birthright, even if in the beginning he was, to misquote Mr. Drage, delivered by a plain nurse and laid free on the linoleum.

Among the laity there is so much ignorance about ill-health which we can dissipate, and many of us are so dissipated, or rather dissipating it. For instance, although everyone knows that Bovril puts beef into you, how few realise that the taking of iron puts rust into you? Such little gems of knowledge, knowledge which helps to foster that perfect confidence between the doctor and his patient, cannot be too widely disseminated.

* * * * *

Very few people understand the true significance of doctor's door plates. Those in the West End of London resemble visiting cards in size. In the East End they more nearly approximate to hoardings. A little consideration will show that the amount of brass put into the doctor's plate is inversely proportional to the amount of brass to be taken out of the patient's pocket.

For a cheap consultation choose a man with an enormous plate.

* * * * *

Sunstroke, which is so prevalent abroad at this time of the year, is best treated by placing coins on the spine.

A holiday in a place where this cure is known can be made quite profitable. Do not, however, when trade is brisk and in the excitement of the stroke, jump up and offer to change 10*s.* notes for those rendering first-aid or your holiday will cost you more.

* * * * *

Rose-water is excellent for the eyes—and even better for the chemists who supply it. It can be made at home quite cheaply. Dig up a few large rose bushes and, after removing some of the more obvious thorns, put the plants through an ordinary domestic mincing machine. The resulting concoction is converted into a decoction by the addition of aqua vulgaris.

The eyes should be thoroughly soused with it night and morning until all the sight has gone.

* * * * *

Members of the Nursing Staff may be interested to know that the attractiveness of their uniform and calling has been appreciated throughout the ages. In a very old book I came across the following sentence: *Dulce et decorum est pro patria mori*, a literal translation of which is as follows: Dulcie is decorous, but the probationer Patricia gets more eye.

Correspondence.

DEAR SIR,—I am directed to inform you that it has been proposed to delete Rule 19 of the Clubs' Union Rules, and for it to substitute the following:

"The annual subscriptions of members joining the Union during the Winter Term shall become due on the 1st day of October, those of members joining during the Spring Term shall become due on the 1st day of January, and those joining in the Summer Term shall become due on the 1st day of May."

I am,
Yours faithfully,
R. L. DUCHESNE, *Hon. Sec.*,
Guy's Hospital Clubs' Union.

Medical School Office,
Guy's Hospital, S.E.1.
August 15th, 1927.

Notices.

THE Editor regrets that owing to an error of folding several copies of the last issue of the GAZETTE were in an incomplete form. Completed copies will be sent to those who received defective copies and who make application for them to the GAZETTE Office.

APPLICATIONS are invited for the post of Chief Clinical Assistant (3 in number) in Medical Out-Patients, duties to commence on October 3rd, 1927. Each Clinical Assistant will be required to attend on two afternoons in the week, and will be paid an honorarium of £100 per annum.

Applications, stating which afternoons would be most convenient, should be made to the Treasurer in the Superintendent's Office on or before Monday, September 19th.

Reviews.

Mind and Its Disorders. 5th Edition. By W. H. B. STODDART, M.D., F.R.C.P. Pp. xx+593. Published by H. K. Lewis & Co., Ltd. *Price* 21*s.*

THIS book has passed through certain vicissitudes. In the preface to the fourth edition, written in 1921, Dr. Stoddart says of the first edition, which appeared in 1908, that his chief aim was to educate the student to think of mental processes in neurological terms. The following sentences will convey what the author means by "thinking in neurological terms:"

"The combined sensation of these neurons—*i.e.*, those of the cerebral cortex—constitute the consciousness of the colony, and this is none other than the consciousness of the organism. This continued consciousness is aroused whenever resistance at the synapses is overcome by the escape of a surcharge of neurokyme from one set of neurons to another" (p. 10); and "The actual mechanism of the process—of ideation—must be conceived as the overcoming of resistance at certain synapses in the peripheral area concerned, the particular synapses varying from precept to precept or from idea to idea, probably with protrusion of certain gemmules and retraction of others" (p. 31).

Since writing the first edition, however, the author has found that the researches of Janet and Freud admit of a clearer insight into mental processes by their approach from the purely psychological standpoint. "But," says Dr. Stoddart, "though I am a loyal disciple of Freud, I am not one of those who would therefore abandon other methods of research into mental processes."

The book will thus produce a singular impression upon the reader, who, throughout a matrix of the most orthodox text book psychiatry, will find interpolated passages of the most fantastic psychoanalytic dogma. This impression of peculiarities will be "fixed" in his mind by Dr. Stoddart's proclivity—in which he nobly lives up to the discipleship above acknowledged—to present hypothesis, and frequently very dubious hypothesis, as incontrovertible and consecrated Truth. This propensity is as well illustrated by the author's attitude to what he takes to be the neurological basis of mentation as by his approach to the tenets of Freudian psycho-pathology. There is little to choose between, on the one hand, jargon about overflow of surcharges of neurokyme, resistance of synapses and protrusion of gemmules, and, on the other, statements such as "that constipation in an apparently normal person is the fulfilment of an unconscious wish to retain fæces" (p. 182), and that the meaning of an epileptic attack is that the epileptic subject is giving physical expression to an unconscious wish to return into his mother's womb (p. 353). Neurokyme is a hypothesis. The work on gemmules is based on foundations about as insecure as is any piece of work in the history of neuro-histology, and the association of consciousness with the overcoming of synaptic resistance is nothing more than an attractive inference. Such notions should not therefore be presented to the student as established facts which should govern his conception of mental processes. The same may be said for the psycho-analytical "Truths" here exemplified, which, throughout the book, are entirely unsupported by what the least critical person could regard as serious evidence.

The book consists of three parts, entitled: "Normal Psychology," "Psychology of the Insane" and "Mental Diseases."

In the first part, devoted to normal psychology, the human mind is described in terms of faculties such as sensation, perception, association of ideas, attention, language, etc. The argument which runs through these chapters is that sensation is the fundamental unit of the mind, and that from this unit the higher faculties of the mind can be built up. "Our general conclusion," writes Dr. Stoddart, on page 11, "is that sensation is essential to consciousness, and in our further consideration it will be shown that mind, with all its higher functions of memory, discrimination, will, reason, etc., may be evolved from sensation, which is indissolubly associated with affective tone, without involving the aid of a 'thinking principle,' 'apperception' or any form of higher intellectual spontaneity." In this remarkable, though not very lucid sentence, Dr. Stoddart claims that he will *show* that mind may be evolved from sensation. His attitude is as dogmatic as it is complacent, and does not assort well with his complete—and, of course, necessary—failure to show anything of the kind in the pages which follow.

In these pages, despite the theoretical handicap which the author gratuitously imposes on himself, the various mental faculties are ably and painstakingly described, though some of the definitions advanced are unecessarily pedantic. Thus, "attention is that process by which the organism is placed in the attitude best adapted to the recognition of stimuli arising from an object attended to or noticed. . . ." This is a tautologism that misses the point. Attention is not a process by which an organism is placed in an attitude, even though the attitude be one of attention. It might as well

be argued that hunger is a process by which the organism is placed in the attitude best adapted to eating—*i.e.*, in the case of a man, that of sitting at table in his dining room. Another such definition is that of sentiment. On page 104 a sentiment is defined as "a sensation-complex which arises when judgment is passed on the way in which a percept or idea affects the feelings." There are three sentiments—the æsthetic, the moral and the intellectual. Æsthetic sentiments include the sentiments of beauty, ugliness, comedy and tragedy. When, therefore, a musical person thrills at hearing unexpectedly a favourite melody he is, according to Dr. Stoddart, experiencing a sensation-complex—whatever that means—which arises when he passes judgment on the way the music affects his feelings. And Dr. Stoddart's conception of sleep as an instinctive process is equally recondite.

The first part ends rather surprisingly with a chapter on "The Ego." The reviewer had been led to suppose from the sentence on page 11 above quoted, that the Ego, together with any form of "higher intellectual spontaneity," had been abolished. But the Ego is a psycho-analytic tenet, and for this reason the reader is introduced to it despite its indissolubility into units of sensation. What, then, is the Ego? The Ego is expounded in two definitions and put in its proper place in a diagram. The Ego is defined on page 113 as "that which experiences desire and gratifies it." On page 114 it is further described as "a recombination of abstractions from different individualities." Both of these are weak definitions, of which, if there is anything to choose between them, the first is perhaps the less futile. Their feebleness, however, is camouflaged by the following diagram, showing the relation of the Ego to the other parts of the personality:—

Conscious		
Preconscious	Ego	Super-Ego
Unconscious	ID	Conscience

(The "id" is the name given to that part of the unconscious which contains repressed desires of a libidinous nature.)

It is to be observed that, in this diagram, "the conscious" has no content. It appears as a sort of vacuum. But the reader is not really intended to form this impression, since theoretically any part of the *pre*-conscious can become conscious. But the blank in the diagram exemplifies a tendency abundantly manifested throughout the book to relegate to the Stygian regions of the unconscious, wishes which, in the majority of persons, are fully conscious. Of this tendency the following sentence is an instance. "Many who lost their dear ones in the war became converted to Spiritualism because it fulfilled their unconscious wish to be able to communicate with the dead" (p. 205).

Why unconscious?

In the second part are described the disorders of the faculties dealt with serially in the first part. The description of these disorders is somewhat monotonous. Thus, sensation, perception, association of ideas, the emotions, etc., are fairly uniformly decreased in certain conditions, such as melancholia, katatoma, exhaustion psychosis, depressed phase of manic depressive insanity, etc., while they are increased in maniacal states of different kinds. The artificiality of thus splitting up the mind into different faculties is only partially remedied by a remark made at the end of the part to the effect that the faculties are essentially interdependent and that disorder of one usually implies disorder of the others.

The third, and much the longest, part of the book is devoted to mental diseases. There are six sub-divisions, dealing with neuroses, the psychoneuroses, the psychoses, toxic insanity, organic insanity, idiocy and imbecility. Then follow chapters on case-taking, the law, methods of staining the central nervous system and the cerebro-spinal fluid. Of these chapters, those on the neuroses and the biogenetic psychoses are much influenced by psycho-analytic doctrine. Thus, neurasthenia, in the limited sense, is the product of repressed auto-erotism. Hysteria is attributable to a conflict between an unconscious wish and its conscious repression. An instance is quoted of hysterical lichen planus, motivated by three unconscious wishes—a wish for self-punishment and a father fixation. The third was a wish to contract syphilis. Hence, the lichen planus. Exophthalmic goitre is described as a form of anxiety hysteria, caused by a fright, worry or anxiety, the memory of which, and the fear associated with which, are repressed. Compulsion and obsessional neuroses are products of a conflict in early childhood between love and hatred towards the same person, in which anal erotism and coprophilia play an important rôle. Manic-depressive insanity is the outcome of repressed sado-masochism; paranoia and chronic alcoholism are *invariably* the expression of repressed homosexuality—it is, in fact, "not far from the truth" (p. 192) to state that "all psychotics are repressed homosexuals"; and both dementia præcox and epilepsy are the ex-

pression of an unconscious desire to re-enter the mother's womb.

In this review stress has been laid on the psycho-analytic bias exhibited in this work. It is by this bias that it is differentiated from other text books of psychiatry. But it must not be supposed that this book is lacking in information. On the contrary, it is clear that Dr. Stoddart has been at great pains to keep in touch with the many different branches of research which in recent years have been carried out upon his subject. His book, in fact, is both compendious and scholarly and upon these grounds—but upon no others—it is to be recommended. It is regrettable that Dr. Stoddart has allowed his learning to be precipitated into pedantry and petrified into dogma. "Destructiveness," writes the author in describing the mental evolution of children, "is an instinct which appears in the fifth year" (p. 70). The instinct is not given much latitude in the time of its appearance. "We find deep down in the unconscious of *every* (italics ours) female the notion that she has become female by losing the penis" (p. 184), a very bold generalisation. "All religions descend from a primitive phallic worship" (p. 204). Occasionally the dogmatism effloresces into mere ignorant prejudice, as when Dr. Stoddart says (p. 202): "The latest Eugenic idea is that the choice of a mate for a psychotic person, or even for a healthy person, should be State controlled." What are the writer's sources for his latest Eugenic ideas? Judging from this book they are considerably less reliable than the sources upon which the mere layman bases his opinion of psycho-analysis.

A little discouraging, however, are certain unexplained hiatuses left by this book in the equipment of the aspiring psycho-analyst. The following is an example. The cardinal principle of psycho-analysis is that disease caused by repressed complexes may be cured by restoring these complexes to consciousness. The principle holds not only of shocks, fights, accidents and the like, but of chronic instinctual attitudes. Further, mental diseases differ from physical in that the former may be cured by explaining their ætiology to the patient. Thus, while a patient with lobar pneumonia would not be materially assisted towards recovery by being convinced that his right lower lobe was in a state of red hepatisation, the sufferer from neurasthenia can, according to Dr. Stoddart, *only* certainly be cured (p. 229) by grasping that he is afflicted with repressed auto-erotism. Now, if neurasthenia can be thus cured, why should not homosexuality be equally curable? The following sentence is worth quoting in full: "Psycho-analysis has revealed that the heterosexual or homosexual tendency is directly traceable to the way in which the subject regards his own father and mother (or their surrogates). *If the home conditions are such* (italics ours) as to cause a child to feel abnormally and persistently dependent upon, and thus, or in some other manner, to identify himself or herself with the parent of the opposite sex, he or she becomes a homosexual." It should only be necessary therefore to cause a patient to become aware of how his home conditions have influenced his feelings for his parents to cure him of alcoholism and paranoia, and, indeed, of most of the psychoses; to change him from a heterosexual to a homosexual; from a homosexual to a heterosexual; or, finally, to deracinate his sexuality completely and allow it, so to speak, to biff about in the void. But just as the student is congratulating himself on his newly-discovered and practically unlimited therapeutic prowess, he is told (p. 194): "Psycho-analysis can no more render such—*i.e.*, homosexual—people heterosexual than it could hope to make heterosexual people homosexual." *But why not?* The student has a right to an explanation of this yawning hiatus in his promised powers.

It is difficult to see how the influence of this book upon the suggestible and comparatively untrained mind of the average medical student could be anything but actively pernicious. But as a record of the gradual preparation of a mind—a learned, courageous, ponderous, uncritical and un-*self*-critical mind—for the reception of the Seed of psycho-analytic Truth, the book is not uninformative.

In the fertile ground of Dr. Stoddart's mind there are no longer any thorns or thistles or choking weeds. But perhaps there never were any, even from the Beginning!

Case Sheet—Artificial Light Treatment. By Dr. Katherine Grainer. Published by H. K. Lewis & Co., Ltd. *Price*, 1,000 at £3 10*s*.

NOW that the value of light treatment is so universally recognised it is much to be regretted that importance of accurate dosage is not more fully appreciated. Too often a "rule of thumb" method of applying this form of treatment is adopted, and it is surprising to find how much the results suffer in consequence.

To avoid this, detailed records of every treatment given should be kept for future reference, and to prevent excessive clerical work these should not be too complicated.

Dr. Grainer's chart for artificial sunlight treatment seems to me to fulfil these conditions admirably.

Sport.

Tennis Club.

Junior Inter-Hospital L. T. Cup.

Final.

Guy's 2nd VI v. St. Thomas's 2nd VI.

THIS match was played on the courts of the Roehampton Club on Friday, July 29th. Both sides were fortunate in being able to turn out a representative team and a very keen day's play resulted. Play commenced at 10.30a.m. with the six singles matches. S. P. Ellis, as the Hospital first string, met his master in Beilby, who played a very vigorous all-court game and quite outclassed his opponent. It was found out later that, but for illness, Beilby would have been high up in our opponent's first six. Ellis played well throughout, some of his cross-court drives being extremely good, but from the first there was no doubt who would win the match.

R. F. Peregrine put up a very good performance in beating Chartres in an extremely keen and close match. There was nothing in it at the finish, but the extra court-craft of Peregrine just turned the scale in his favour.

C. E. W. Kurtz, who captained the side with great enthusiasm, scored a good win by taking his match in the final set. Kurtz started badly and never really found a length in the first set, but he played extremely well in the second set and quite outplayed his opponent. The final set was a ding-dong struggle, 3 all, 4 all and 5 all being called. Clayton led at 6–5, but Kurtz finished strongly, winning the next three games and the match. Clayton seemed to tire at the end.

D. K. Gaitskell played with his usual dogged determination and wore down Scott by his great steadiness. Gaitskell played a base line game, rarely coming up to the net and relying chiefly on the mistakes of his opponent to win him the match.

F. G. Booker found the turf, which was rather damp, too slow for his usual vigorous game. Booker hates to play a slow game, but goes out for " aces " to win his matches. He found Gillett a very steady opponent, and this, combined with the slow speed of the ground, gave Gillett the match.

G. M. Housden had a hard match with Bell, who led by 5 games to 2 in the first set. Housden caught up to 5 all, but Bell took the next 2 games to win the first set. Bell opened the second set with his service and lost the game after " deuce " had been called nine times. Housden improved greatly and quickly took the set without the loss of a game. Bell went ahead in the final set and again led 5 games to 2, and although Housden made an effort he just failed to catch Bell up.

Lunch was taken after the singles with the score being level at 3 matches all.

The doubles started disastrously, St. Thomas's winning all the first round to lead by 6 matches to 3. Our third pair had hard luck in losing their match in the third set.

In the second round Ellis and Booker lost to their second pair after a close match, but Kurtz and Peregrine beat their third pair in the final set. Gaitskell and Housden accomplished the best performance of the day by defeating their first pair after losing the first set. Gaitskell was extremely good, and again and again saved the game by his steadiness.

St. Thomas's now led by 7 matches to 5, which meant that we had to win the remaining matches to secure the Cup.

Ellis and Booker beat Clayton and Scott very easily and Gaitskell and Housden defeated Chartres and Gillett. The score was now 7 matches all. Amidst intense excitement Beilby and Stanley won the remaining match and the Cup for St. Thomas's by defeating Kurtz and Peregrine in straight sets.

It was a great match and St. Thomas's well merited their victory.

For the third year in succession Guy's have been in the running for the Junior Cup, only to lose in the final stage. It was not lack of keenness, but rather lack of combination, combined with the great steadiness and team work of our opponents, which lost us the match. The doubles pairs were constantly split up and changed about during the season, with the result that the necessary understanding for a good combination was never obtained. Next year the pairing must be settled earlier in the season, so that better combination may be obtained.

Singles

S. P. Ellis lost to Beilby 2–6, 2–6.
R. F. Peregrine beat Chartres 7–5, 8–6.
C. E. W. Kurtz (capt.) beat Clayton 3–6, 6–2, 8–6.
D. K. Gaitskell beat Scott 6–4, 6–4.
F. G. Booker lost to Gillett 1–6, 6–8.
G. M. Housden lost to Bell 5–7, 6–0, 4–6.

Doubles

Ellis and Booker—
Lost to Beilby and Stanley 6–8, 3–6.
Lost to Chartres and Gillett 1–6, 8–6, 6–8.
Beat Clayton and Scott 6–1, 6–4.

Kurtz and Peregrine—
Lost to Beilby and Stanley 3–6, 4–6.
Lost to Chartres and Gillett 5–7, 2–6.
Beat Clayton and Scott 6–2, 3–6, 6–2.

Gaitskell and Housden—
Beat Beilby and Stanley 4–6, 6–3, 6–4.
Beat Chartres and Gillett 2–6, 6–3, 6–3.
Lost to Clayton and Scott 4–6, 6–3, 4–6.

Result—Guy's 7 matches, St. Thomas's 8 matches.

Cricket Club.

Cricket Report for 1927 Season.

THE most important feature of the past season is certainly the recapture of the "Hospitals' Cricket Cup." Our club match record is not an improvement on last season. This can be largely explained by the fact that a certain proportion of our first eleven were holding house appointments, and so could not play regularly and, secondly, the July examinations weakened our team considerably at one period.

For Cup Tie matches we were practically always at full strength and, in spite of lack of practice, our cricket reached a high standard. This year we were without L. G. Van Schalkwijk for cup matches, and the bowling fell very largely on the shoulders of the captain, J. Durr. Durr is to be congratulated on his captaincy all through; his handling of the scanty bowling material at his disposal was admirable. His own bowling has been a feature throughout the season, his best performances being against Streatham (6 for 52) and Old Charlton (7 for 57.)

In batting, E. J. Pye-Smith stands out as the most consistent and valuable bat of the season. In each of the Cup matches when most needed he "came off," and he certainly has had a large part in our regaining the Cup.

A. H. Curtis has shown himself the most improved member of the team this season. His feat in the Cup Final of 6 for 6 (1st innings), 3 for 31 (2nd innings) and 46 not out (1st innings) and 33 not out (2nd innings) was really excellent, and his stand at the final phase of the match with F. H. B. Spence, when the position was very critical, saved the situation.

The fielding of A. G. Ensor at cover point has been exceedingly good throughout the season, and it was good to see him play some very excellent first wicket stands, his most valuable innings having been against Northants Amateurs, when he held his wicket up while others failed until Durr joined him, and together they pulled the match out of the fire and won for us our most important club victory.

T. O. Garland, although not so conspicuous as formerly with the bat, kept wicket with much brilliance, his "keeping" in the Cup Ties being exceptionally valuable.

This season will, unfortunately, be the last for several of the present eleven, but none will be missed more than L. S. Williams. Williams was secretary in 1924 and captained the Guy's eleven for two years, 1925 and 1926. His personality and keenness have been a very great asset to Guy's cricket during these last few years. Thanks to his tact and geniality, the camaraderie which has existed in the team of recent years has assisted us in keeping a high standard of cricket and keenness and enabled us to prove more than a match for our various opponents throughout the season.

Result of 1st XI Matches

Versus	*Score*	*Opponents*	*Results and Actual Margin*
H. Bromley	202 for 7	213	Drawn
H. Private Banks	69	233	Lost, 6 wickets
H. Catford Wanderers	152	115	Won, 37 runs
A. Streatham	179	*211 for 7	Lost, 32 runs
H. Honor Oak	107	119	Lost, 12 runs
H. Repton Pilgrims	217 for 5	234	Drawn
A. Chelmsford	265	155	Won, 110 runs
A. Old Charlton	201 for 8	103	Won, 98 runs
A. Northants Amateurs	175 for 7	165	Won, 3 wickets
A. Bromley	*240 for 8	81	Won, 159 runs
A. Wellingboro' Masters	112	116 for 7	Lost, 3 wickets
A. Virginia Water	40	70	Lost, 30 runs
A. Honor Oak	115	*233 for 6	Lost, 118 runs

A. Three Counties' M.H.	154	164 for 9	Lost, 1 wicket
H. Occasionals			Won,
H. Streatham			Lost,
A. Herts Wanderers			Won,
1st XI Cup Matches			
H. Royal Dental	233	82	Won, 151 runs
A. London	210 for 4	193	Won, 6 wickets
H. St. George's	130 for 3	129	Won, 7 wickets
H. St. Bartholomew's	240	227	Won, 6 wickets
	113 for 4	125	

BOWLING.

	J. Durr				*J. G. Van Schalkwijk*				*A. H. Curtis*				*G. J. Clarke*				*L. S. Williams*			
Versus	*o.*	*m.*	*r.*	*w.*	*o.*	*m.*	*r.*	*w.*	*o.*	*m.*	*r.*	*w.*	*o.*	*m.*	*r.*	*w.*	*o.*	*m.*	*r.*	*w.*
Bromley	12	0	63	2	15.4	4	50	6	11	1	37	2	5	0	25	0			—	
Private Banks	13.2	0	58	3	13	2	61	2	5	1	18	1	9	0	47	2			—	
Catford Wanderers	19	7	49	5	15.4	3	31	3	10	2	20	2			—				—	
Streatham	15	1	52	6			—		16	2	75	1	8	0	33	0			—	
Honor Oak	11	1	33	1	11	1	26	1	7.4	0	29	6	7	1	27	2			—	
Repton Pilgrims	20	3	75	3	22	4	68	1	12	1	49	3	6	0	27	0			—	
Chelmsford	26	7	77	4	26	4	65	6			—				—				—	
R.D. Hospital	15	2	36	5			—		9	5	12	4	10	0	28	1			—	
Old Charlton	12	1	57	7			—		11.4	0	38	3			—				—	
Northants Amateurs	14	3	31	3	20	5	38	3	15	3	41	3	8	2	25	1			—	
London Hospital	30	4	89	6			—				—		24	7	47	2			—	
Bromley	13	7	21	3	13	3	31	3	3	1	5	1	4	1	7	3			—	
Wellingboro' Masters	14	6	30	2	10	1	25	0	8	1	24	2	5	1	12	2			—	
Three Counties' M.H.	24	5	72	5			—				—		21	4	70	2			—	
Virginia Water	15	4	27	3	14	2	25	4			—				—				—	
Honor Oak	18	2	65	4	19	0	90	2	12	6	24	0	3	0	17	0			—	
St. George's	27	9	51	4			—		19	9	16	1	13	2	34	1	3	1	7	1
St. Bartholomew's	25	5	90	1			—		27	7	61	6	9	1	27	0	5	0	15	2
	16	6	33	3			—		12	4	31	3	7	1	21	1	4	0	21	2
	Average—14.4				*Average*—16.4				*Average*—12.6				*Average*—26.2				*Average*—8.6			

BATTING.

Versus	E. J. Pye-Smith *Runs*	T. O. Garland *Runs*	L. S. Williams *Runs*	A. G. Ensor *Runs*	A. H. Curtis *Runs*	G. J. Clarke *Runs*	J. Durr *Runs*	J. Hutchinson *Runs*	H. S. Spence *Runs*	J. Eustace *Runs*	J. G. van Schalkwijk *Runs*
Bromley	0	28	—	—	50	15	4	1	85	—	6*
Private Banks	15	—	—	—	0	3	16	—	16	—	1
Catford Wanderers	44	—	—	7	8	—	7	4*	12	3	31
Streatham	—	—	93*	25	23	8	15	—	10	0	—
Honor Oak	40	—	7	1	0	5	0	4	10	8*	18
Repton Pilgrims	—	42	—	13	56	50*	44	—	0	—	1*
Chelmsford	32	24	36	—	—	—	20	6	80	17	34
R.D. Hospital	80	1	23	3	50	0	12	0	32	6*	—
Old Charlton	—	44	—	37	55	22	—	11	0	4	—
Northants Amateurs	—	3	—	83	3	4	53*	0	—	0	22
London Hospital	63	31	48	4	—	17*	—	—	36*	—	—
Bromley	—	—	78	—	51	14	11	5	47	16*	4
Wellingboro' Masters	—	—	3	3	14	9	16	15	7	5	11
Three Counties' M.H.	—	20	5	51	—	0	44	5	8	6	—
Virginia Water	—	0	—	—	—	—	10	0	—	7	12
Honor Oak	42	0	—	0	9	10	8	—	12	2	16
St. George's	68*	21	1	14	—	—	—	—	17*	—	—
St. Bartholomew's	58	21	39	10	46*	15	0	4	0	7	—
	30	16	0	1	33*	—	—	—	17*	—	—

	No. of Innings	Times Not Out	Runs	Highest Innings	Average
E. J. Pye-Smith	11	1	472	80	47.2
L. S. Williams	11	1	333	93*	33.3
A. H. Curtis	14	2	398	56	33.1
H. Spence	17	3	389	85	27.8
T. O. Garland	13	0	251	44	19.3
J. Durr	15	1	260	53*	18.6
A. G. Ensor	14	0	252	83	18
J. G. van Schalkwijk	11	2	156	34	17.3
G. J. Clarke	14	2	172	50*	14.4
J. Eustace	13	3	81	17	8.1
J. Hutchinson	12	1	55	15	5

* Not Out

Hospital Information, etc.

Pass List.

Conjoint Board.

July, 1927

Medicine

*G. W. Rake	O. A. Beadle
*W. V. Beach	*D. E. Dunnill
*L. T. Ride	H. G. Floyd
*O. Plowright	*J. R. Rickett
D. F. Kanaar	*P. C. Wickremesinghe
H. I. Maister	T. G. Scott
P. M. Deville	W. S. McConnell
*A. H. Brockbank	*T. S. Daniels
*C. E. Gallagher	W. F. Hudson
*F. J. Mayne	*E. C. Till
*I. Bakhsh	R. V. Bradlaw

Surgery

*W. V. Beach	*L. T. Ride
W. H. Miller	C. H. Egan
D. K. Weston	D. Ellis
*S. I. Abrahams	W. J. Heely
E. C. H. Huddy	E. H. Hudson
G. M. Housden	*R. Maneschewitz
*N. H. Allen	W. H. Myburgh
E. L. Graaf	S. C. Gross
V. C. Lansdale	*K. S. Ayyar

Midwifery

*L. T. Ride	H. G. Floyd
D. F. Kanaar	*P. C. Wickremesinghe
H. I. Maister	T. G. Scott
T. O. Garland	W. E. Herbert
R. G. de Kock	R. T. Jones
C. J. V. Dobbin	H. Epstein
W. H. Miller	C. H. Egan
D. K. Weston	*S. I. Abrahams
J. E. Crooke	M. T. O'Sullivan
*M. K. Giji	F. G. Booker
S. H. Croot	G. N. Wood
W. P. R. Swemmer	C. Arkles
J. H. Richmond	J. W. Ellis
E. C. H. Huddy	H. A. Clarke
G. Van R. Mostert	F. E. G. Hopkins
C. R. E. Freezer	D. Ellis

* Have now completed the Examination

Pre-Medical Examination.

July, 1927

Chemistry and Physics

U. L. W. Whitling	R. J. G. Grewcock
*C. V. Kark	†T. Morgan
R. A. P. Hogbin	F. R. M. Wallis
†E. V. B. Widdowson	*J. T. Holford
F. R. Hayward	L. H. Smith
C. W. T. Shuttleworth	†J. W. Small
†H. V. D. A. Iles	†R. J. Eustace
†R. W. Tuck	*R. G. Stainton
*K. C. Gebbie	

† Chemistry only

* Physics only

Conjoint Board.

Second Examination.

July, 1927

Part I

Anatomy and Physiology

†A. C. Hauntfleisch	R. B. Sutcliffe
J. F. Lockwood	F. N. Corfe
P. A. I. Gorer	*V. Constad
*J. S. Lane	*W. J. D'Rosario
F. S. Krusin	N. S. Narasimham
†W. J. Johnson	

† Anatomy only

*Physiology only

Part II

Pharmacology and Materia Medica

C. G. L. de Silva	H. A. Clarke
F. S. Warner	R. E. Rix
E. M. MacLachlan	R. G. Sawter
L. B. Langmead	E. Fulford

L.D.S.

Preliminary Science.

Chemistry and Physics

July, 1927

J. W. Woolley	*J. R. Cohen

* Physics only

L.D.S.

Final Examination.

June, 1927

Part I

V. H. D. Bascombe	N. B. Coltart
H. H. Kenshole	W. W. Levy
M. J. O'Donnell	T. J. Barnes
D. C. Buckley	D. J. R. Catchpole
A. H. Crowley	L. M. Garrett
M. A. Rushton	N. L. Salton
G. G. Thwaits	

Part II

V. H. D. Bascombe	N. B. Coltart
H. H. Kenshole	W. W. Levy
M. J. O'Donnell	R. A. Bagg
E. Britstone	R. L. Dale
E. J. Dalling	H. A. Ginn
E. M. Greenwood	F. S. Hobbs
L. L. Lester	C. J. O'Donoghue
R. F. Prichard	J. R. Prior
S. Sharp	D. A. Thomas
R. T. Towne	P. R. Walter

Society of Apothecaries of London.

August, 1927

Forensic Medicine

T. C. Lansdale has now completed the Examination.

University of London.

1st Examination for Medical and Dental Degrees.

July, 1927

A. M. Cantor	J. C. Colbeck
R. T. Elven	C. Gilchrist
G. C. Post	R. L. Soper
W. P. Stamm	G. H. Taylor
A. R. F. Thompson	S. W. Wright.

Part I

2nd Examination for Medical Degrees.

July, 1927

K. Biden-Steele	H. Bloom
A. M. Cantor	G. A. Dingemans
D. Erskine	A. Lewis
R. W. H. McNabb	J. F. Morris
I. Moshinsky	C. H. Rogerson
C. Rutter	

University of Cambridge,

Examination for the Diploma in Medical Radiology and Electrology.

July, 1927

F. L. Rayner	A. Y. M. Salama

The Services.

Royal Naval Medical Services.

H. A. Ginn to H.M.S. Pembroke.

Papers by Guy's Men.

R. Brooke, F.R.C.S. Diabetic Gangrene Treated by Conservative Surgical Measures, *Lancet*, 1927, ii, 274.

Hildred Carlill, M.D., and another. Character of Cerebral Cerebro-Spinal Fluid in General Paralysis. *Ibid.*, 275.

G. B. Dowling, M.D. The Treatment of Ring Worm of the Scalp by Thallium Depilation, *Brit. Med. Jour.*, 1927, ii, 261.

T. B. Layton, D.S.O., M.S. Case of Sinusitis, *Proc. Roy. Soc. Med.*, 1927, xx, 1,621; *Sec. Laryngol.* 53.

W. M. Mollison, M.Ch. Specimen of Ethnoid Showing Healed Fracture, *Ibid.*, 1,638; *Ibid.* 70.

C. Gill-Carey, F.R.C.S. Ulceration of Gum: Hypertrophic Laryngitis, Case for Diagnosis, *Ibid.*, 1,641; *Ibid.*, 73.

C. Lambrinudi, F.R.C.S. A Method of Treating Lumbar Scoliosis, *Ibid.* 1,698; *Sec. Orthopædics*, 58.

Alan Todd, M.S. Case of ? Periostitis of Metatarsal, *Ibid.*, 1,700; *Ibid.*, 60.

C. S. Gibson, O.B.E., M.A., W. Kelsey Fry, L.D.S., M.R.C.S., and Dr. E. E. Walker. Synthetic Resins as Materials for the Construction of Complete Dentures, *Brit. Dent. Jour.*, 1927, xlviii, 1,013.

W. H. Sodeau, D.Sc., C. S. Gibson, O.B.E., M.A. The Use of Plaster of Paris as an Impression Material, *Dental Record*, 1927, xlvii, 439.

J. Allan Berry, M.S., F.R.C.S. Multiple Diverticula of the Jejunum, *Lancet*, ii, 1927, 496.

W. W. Payne, M.B., B.S., E. P. Poulton, F.R.C.P. Experiments on Visceral Sensation, Part I, The Relation of Pain to Activity in the Œsophagus, *Jour. Phys.* 1927, lxii, 217.

C. P. Symonds, M.D., F.R.C.P. The Diagnosis and Treatment of Poliomyelitis, *Clinical Journal*, 1927, lvi, 397.

J. M. H. Campbell, M.A., M.B. Auricular Fibrillation with Cerebral Embolism, *Ibid.*, 364.

Change of Address.

Maurice Mitman, M.B., B.S., M.R.C.P., South Western Hospital, Landor Road, Stockwell, S.W.9.

A. Ralph Thompson, Ch.M., F.R.C.S., to 143, Harley Street, W.1. 'Phone: Mayfair 4711.

Guy's Hospital Gazette.

(Established 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—The Counting House, Guy's Hospital, London, S.E.1.

Annual Subscription, including *Directory of Guy's Men* (*Medical and Dental*), **12s. 6d.** Post Free, payable in advance.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the Gazette can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Advertisement Rates on application to "The Gazette Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.

Eds. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *September 24th, 1927.* *Number 1022*

PASSIM

IT is our happy custom to provide at this time of the year a special "Students" number of the GAZETTE, which, besides being a means of extending the warmest of welcomes to those who are about to join the Hospital and so earn the title of a "Guy's man," also contains an abbreviated guide to the Hospital and Medical School. By combining a guide with our welcome we hope not only to make our neophytes feel speedily at home, but also to prevent them committing the indiscretion of mistaking the Nurses' Home for the adjacent Laboratories.

At this time of the year it is usual to see many new faces wandering in the Park, each one endeavouring to appear as though he knew exactly where he wanted to go and was not really lost in the vastness of the Hospital. In this respect you are more fortunate than those who started before you, as recently the entire Medical School has been confined to one block of the Hospital instead of consisting of many isolated units, as was the case before the new School was opened. Some of you we have seen before dining by request in the College Refectory, and we have wondered which of you looked most likely to gain the Entrance Scholarships and whether at last we should be able to sell our well-worn chemistry and physics books.

In the name of all connected with Guy's we bid you welcome. From the time when you sign the register in the Medical School you become a very real part of the Hospital, its good name is in your keeping and its ideals must be yours. If, as must be the case from the very choice of your profession, your ambitions are entirely unselfish, your career at the Hospital will be the most delightful period of your life. You will realise that at last you are really starting to study to fit yourself for a life's work devoted to the alleviation of human suffering, and this fact will be an incentive to your work, which you have never before experienced, and will fill you with a sense of the responsibility that your chosen career entails. At times during your pre-clinical training your expectations may not be fully realised. You will feel that your time might be better employed than in learning that the latent heat of fusion of ice is 80, or the yet more curious fact that "acetamide smells like mice." But take heart. Later you will realise to the full that you have been sub conciously building up those faculties of clear reasoning and keen insight which are so essential a possession of the good clinician.

The standard of work at the Hospital is at the present time extremely high, as is testified by the recent examination pass-lists, and it is in your hands whether this high standard is maintained. But to create a favourable impression when in front of your examiners is but an incident in your immediate future. Your real work lies among the sick; their welfare will be entrusted to you, and should any of your efforts on their behalf fall short of your best you will be betraying your trust. Your work will be hard, your responsibilities ever increasing when you eventually reach the clinical part of your training. You will not be rewarded by a stream of cheques, as you might be were you a business man or labourer. The art of medicine is not a business—it stands at the bottom of the list of remunerative professions.

You are living in an age in which the opportunities for preventive medicine are greater than they have ever been before. You will come to realise the wants and difficulties under which those less fortunate in their birthright live; firstly, in your acquaintance with them in the wards, later in the Out-Patient Department and, finally, in

their homes. Children are hourly born into the world ear-marked for disease. The conditions of overcrowding and squalor under which they live prevent them from spending those years, when their minds and bodies are developing, in healthy surroundings. To you will fall the task of educating the public to a sense of their responsibilities towards the future generation. A certain knowledge of medicine and surgery are useful weapons to take out with you as "General Practitioners" to fight against unhappiness and disease, but do not think that they are the most important. Nature needs little help in curing most of those diseases which are curable. Many of the common diseases of to-day would soon be rareties were every student sent forth from hospital, not as a doctor weighed down with medicines, but rather as a Missionary armed with a cake of soap and a book on birth control.

The bells of our local church have reminded us that we are not writing a sermon but an address of welcome. In a few days when the strangeness of new surroundings have worn off, when you have been reproved for trespassing in the Nurses' Home, and have recovered from the shock of mistaking one of our eminent professors for a lesser personage, you will discover that you have really become a Guy's man. In whatever sport you spend your pare time you will find a club here anxious to include you among its members. Do not wait to be asked to join. Study the athletic notice board in the Colonnade and make yourself known to the club's honorary secretary. Play hard, for the Hospital is as jealous of its athletic prowess as of its scholarship. Join the Clubs' Union, and by joining you will become a member of all or any of its constituent institutions. Many of its clubs and societies have notices in this GAZETTE, while notices of the others are all to be found in the *Year Book*, obtainable at the Medical School Office. Find your club and join straight away and, whether you become one of the famous 1st XV pack or no, may you thrive and be happy.

WE hear with the deepest regret, on going to press, of the sudden death of Professor Adrian Stokes on the West Coast of Africa, where he was carrying out research work on yellow fever under the auspices of the Rockfeller Institution. His death has come as a great blow and grief to all of us who knew him here at Guy's.

We hope, in a later issue, to publish a fuller obituary, including an account of the most useful work which Professor Stokes did during the recent war.

In the meantime we can but extend our heartfelt sympathies to his relatives in their sudden bereavement. He will be greatly missed by us all.

Obituary.

Arthur Percy Allan.

THE death of Dr. Arthur Percy Allan will remind those who were at Guy's Hospital in the 'nineties of an energetic being, prominent in all matters of interest, making his presence felt by his reasonable and frank attitude and incisive power.

Tall, upright, plump rather than athletic in appearance, he commanded attention by the fine shape of his forehead. An excellent *raconteur*, he was of a temperament so genial that he warmed the spirits of his companions, who felt the glow continue after they had left him.

He was an admirable companion, and those who knew him well found a sound head, a warm heart and a good counsellor.

His studies and interests ranged over a wide field. In early days he made a thorough investigation into psychic phenomena, with a wholly negative result. Latterly he had studied witchcraft and allied subjects and had become an enthusiastic believer in Freud. Indeed, enthusiasm for great masters in art, science and literature had always been characteristic of him, and he was equally appreciative of the genius of Aubrey Bewdsley and of Sir Frederick Gowland Hopkins.

Reading widely and with a wise discrimination, he enjoyed with a particular gusto the long, leisurely novel, in which the adventurer experiences every kind of fortune, and quite recently he had read the translation of *Simplicissimus*, by Hans von Grimmelshansen.

In brief, he filled out a rich human life adequately and he was of an unfailing kindness. Many beside myself will mourn him as a staunch and dear friend.

An authentic character has departed from us, and, as Goethe truly said, personality is incommunicable and there is nothing like it on earth.

B. P. O'NEILL.

By Way of Introduction.

By F. J. STEWARD, M.S., F.R.C.S., Senior Surgeon, Guy's Hospital.

A SHORT time ago I took a non-medical friend round some parts of Guy's. He knew little of hospitals, but was much interested in what he saw. As we parted he remarked, "Guy's is a great place."

Very well said, I thought, for Guy's is surely a great place in many ways.

It will strike you, who are new to it, as great in size in the first place, for well I remember this feeling when I first joined. The size of the place was rather bewildering even at that time; and the additions and extensions since then have been many.

Great, too, in its past history, as you will soon realise when the names of some of the famous Guy's men of the past and some of their doings become known to you. Sir Astley Cooper, perhaps the greatest surgeon of his time, whose statue you may see in St. Paul's Cathedral, and near by it the statue of a noted Guy's physician, Dr. William Babington, the only other member of the medical profession thus honoured; Hodgkin, the founder of the Guy's Museum, best known by the disease that bears his name; Bright, whose epoch making papers upon nephritis were published just a hundred years ago; Addison, who discovered Addison's disease and also first correctly described the pathology of pneumonia; Benjamin Babington, who invented the laryngoscope; Hilton, Gull, Wilks, Moxon and many others.

Great also in sport. Here, again, Guy's has always more than held her own. Go into the Students' Club and see for yourselves. Look at the Cups there and study their records, and think for a moment what they mean.

But greatest of all is the spirit of Guy's, or, as J. M. Barrie would call it, the "something," to which everybody and everything connected with Guy's, both past and present, in some degree contribute. It is ever present, and working unseen like leaven it makes a Guy's man of every student who comes here.

Thus, something of the place in which you have elected to work, what of the work you are going to do there? A study of the medical curriculum —and all should study it carefully—is liable to be rather a shock. There are so many subjects to be grappled with, so many attendances to be kept, so many appointments to be held, that the time available seems to be all too short, and the whole thing somewhat terrifying. But there is really no need for pessimism, for the work laid down and the standard of knowledge required are well within the capabilities of the average student, as is clearly proved by the fact that the vast majority are able to get through the work in a reasonable time.

As regards method, you will do better to emulate the tortoise rather than the hare, for regular systematic work even in quite small doses will serve you far better than will long dormant periods, followed by feverish consumption of midnight oil at the approach of each examination.

Examinations, of course, have to be passed and are useful milestones, but in many respects may be classed as necessary evils. Do not allow them to loom too large, however, and thus to interfere too much with your real work, which is to endeavour to acquire the knowledge and skill needed for the successful exercise of your profession.

In conclusion, I would say to every new student, bring your best and all your best, both in work and play, and remember that Guy's is generous, and the spirit of Guy's awaits you, so that however much you may bring, in the end you will not be the loser.

To the Dental Student.

By Mr. H. C. MALLESON

TO those who, this September, are entering Guy's as Dental Students, we extend a hearty welcome.

In their work they will be often in contact with their medical confreres and, as members of the Clubs' Union, they will be able to compete on friendly terms with them in the many fields of sport and recreation provided. Of more importance still, they can share equally in building up the various "teams" which represent the Hospital; but, above all, in the great game of hospital life they can all play their hardest for the side we all know as "Guy's."

We imagine that a new student having completed his pre-medical curriculum must be somewhat awed by the amount of work he is expected to get through in his four years of study. This has been carefully arranged as between general and dental subjects to enable him to give sufficient time to each. We do not suggest that this is an easy matter; on the contrary good solid work, and, above all, regular attendances will be required.

From the commencement he will gradually attain more confidence, which will enable him to surmount difficulties which are bound to arise, and we need only remind him that members of the Staff are always willing and glad to help a student with practical advice.

The new student will find that the recent extensions to the Dental School have resulted in all departments being enlarged, together with the addition of rooms and laboratories set apart for specific purposes. All equipment has been brought up-to-date, and we have no hesitation in saying that he has joined a School which ranks as one of the best, if not the best, in the United Kingdom.

With these advantages and the fact that the Dental School is an integral part of a great general hospital, the student is making a good beginning, and the four years or more which he spends with us should prove one of the happiest periods of his career.

To Those Undertaking the Pre-Clinical Sciences.

By Professor T. B. JOHNSTON.

THE choice of a profession is one of the most important problems with which a young man is faced when the time comes for him to make up his mind what his lifework is to be. A very large number of factors come into play to affect the ultimate decision, and it is only a relatively small proportion of the men entering medicine who are irresistibly drawn to it for its own sake. It is not surprising that, in the cases of those men whose personal wishes have not determined the issue, there should be a certain degree of apathy discernible at first. But however apathetic a man may be at the outset, it is not long before he feels the fascination of the work growing upon him and, by the time he enters the wards and begins to assume responsibilities for the care of patients, keenness and enthusiasm have come to him. In medicine, even more so than in any other profession, a man must have keenness and enthusiasm if he is not to become a slave and drudge.

It is unfortunate that the first year of medical study is apparently lacking in the human interest. Many medical students rather tend to regard their Chemistry, Physics and Biology as an unnecessary burden, handed down by tradition and having little real bearing on their future work. No greater mistake could be made. It is impossible to emphasise too strongly how essential it is for the student to have a thorough knowledge of the general principles of these subjects if he is to derive the full benefit from his subsequent studies. Living processes, whether physiological or pathological, obey laws of chemistry and physics. Empiricism in medicine has had its day, but it is dying hard. The more fully chemical and physical principles are worked out for, and applied to, living processes, the sooner will empiricism disappear for ever.

No one wishes to check the desire of the student to reach the more obviously human interests of Anatomy and Physiology and, indeed, every encouragement and opportunity are given to him to complete his preliminary scientific studies within the period of his first academic year. "Well begun is half done," and the man who clears his first hurdle at the first attempt never looks back during the rest of his course. It is, unfortunately, true that the "cramming" of a mass of facts or theories may get a man through an examination, but unless he has a firm grip of the general basic principles, it would have been much better for himself had he been rejected.

Admission to the Dissecting Room and the Physiological Laboratories mark the commencement of the second stage in the life of the medical student. Henceforward, his work possesses an obviously human interest which very rarely fails to attract, but, despite their attractiveness, Anatomy and Physiology can only be mastered by whole-hearted effort and continuous industry, and mastered they must be if known facts of structure and function are to become so familiar as to be of real practical value, not only for the final period of student life, but throughout the subsequent career. Without a sound knowledge of Anatomy and Physiology it is impossible to deal with patients in a scientific manner. But the labour expended on these subjects produces other and equally important results. Powers of obser-

vation are trained, dexterity of hand and finger in a greater or lesser degree, the power to criticise, to sift and weigh evidence—all these are acquired, not with the aid of the midnight oil, but subconsciously as the ordinary routine work is faithfully carried out. In this way true education results from a medical training and a wider medical outlook is obtained even before the clinical period is entered.

Eight terms are allotted to the pre-clinical subjects, and only a small majority of students spend more than nine terms in the school before they complete the second examination and are allowed to commence their clinical studies. In these eight or nine terms, as the case may be, the student's time is fully occupied, but there is ample opportunity both for mental and bodily recreation. Every man who is physically able to do so, should take up one winter and one summer game, for no medical student can do good work who is not thoroughly fit, and, from the very character of his work, no medical student can hope to keep fit unless he takes his exercise in a regular manner.

Abler and more experienced pens than mine tell of the clinical period which forms the third and last stage in the life of the medical student, and they describe the additional qualities which are acquired in the wards. Those for whom these lines are written have only recently entered Guy's, but although their clinical work seems to be still far distant, I can assure them that it will not be long before they begin to appreciate its atmosphere and to feel that the title "a Guy's man" carries with it a certain responsibility to the past for the maintenance of a tradition, firmly established and admirably expressed in the words "Dare Quam Accipere," which tells of the unselfish service in the past, in the present and which must be our inspiration for the future.

To Those Entering the Medical Wards.

By Dr. J. M. H. CAMPBELL, Assistant Physician, Guy's Hospital.

SIR WILLIAM GULL, whose writings I hope you will some day read, said he had never understood the words under the Guy's arms until he tasted the Out-Patients' physic. The same motto cannot be applied to advice, but this has not prevented the Editor ordering me to try and write something.

In ten years' time when you look back you will be surprised at the positions held by your one-time fellow students. One will have fulfilled even his friend's prophesies, one who seemed equally brilliant will not have got very far and a third, whom you thought rather dull, will have gone on from strength to strength. If you understand the reason for this you will know what is important and how to arrange your work; without some guiding principle you will be lost among the mass of information put before you—unable to distinguish the essentials needed for your life's work from the details needed for your examinations.

Lord Chesterfield's remark about life might certainly be paraphrased for that of the medical student as regards examinations, but for the moment you have a fairly clear field and need not think much about them. Your real work will deal with individual men and women, and nearly all you know about disease will be modified by their peculiarities and environment. That is why what you learn from each patient is so much more important than what you can learn from text books. You cannot spend too much time finding out every detail about patients under your own care, and you should be familiar with all those in your wards. Different methods suit different people, but the following disjointed remarks may be helpful to some of you.

Keep notes of the patients you see—at first one or two of the new patients you have seen that day will be enough. Make these as complete as possible with the original history, physical examination and provisional diagnosis compared with the final diagnosis after laboratory findings, operation, recovery or death.

Pay special attention to physical signs. There are many things you can teach yourself later in practice, but if you are doubtful about something you see or feel then there may be no way of making more sure. In hospital you—and the patient as well—have much more time to devote to this, and equally important, you have other people to check what you have found. You should go to the wards two or three times a week for this purpose after tea.

When you get home you should read about the diseases of the patients you have seen during the day—or, just at first, of those selected patients on whom you are writing notes. Your systematic reading can come later, and in this way you will find it more interesting and will see whether your

patient was "typical" of that particular disease or whether his was rather an unusual case.

Try and distinguish between what is certain knowledge and what is the opinion of your teacher about something still undecided. Partly because so much teaching is done before the patient this difference cannot always be emphasised by the teacher himself.

Attend as many post-mortems as possible and try and fix a clear picture of the diseased conditions you see there, so that when you next examine a chest you will have this picture to compare with your findings. This is specially important now because you will never have the same opportunities again.

Write your reports clearly and simply. It is not more scientific to speak of "taking nourishment" than of "eating," and there is no advantage in using more technical terms than are needed for accuracy. We can still read the works of many of the older physicians with pleasure and profit, but I am not sure that the next generation will say the same of us.

Do not think only of Bed 37 with streptococcal septicæmia, but of the man whose pneumonia has forced him to give up his work and left his family in difficulties at home. It is inevitable that the first should be emphasised in hospital, but both are important. *Across the Bridges*, by Alec Patterson, will give you a delightful picture of your Bermondsey patient when he is not in hospital. Remember that from the day you enter the wards at Guy's you occupy a position of responsibility, and your work is not only helpful to the H.P.'s and Staff, but may make a great deal of difference to the patient under your care.

To Those Entering the Surgical Wards.

By Mr. W. H. OGILVIE, Assistant Surgeon to Guy's Hospital.

GUY'S HOSPITAL rightly enjoys a world-wide reputation as a medical school, which for generations has sent into all parts of the world doctors armed with practical knowledge and with the willingness and ability to take responsibility which a practical training implies. There are two special advantages of the teaching here—the great wealth of material which passes through the wards and out-patients' department, and the responsibility which is given to every man from the very outset of his career. In each appointment he is not taught only, he is asked to carry out essential work for the Hospital and for his patients, and trusted to carry it out well. At the beginning and close of the clinical period stand two appointments which are peculiar to Guy's, Surgical Ward Clerk and Clinical, and both of them have this combination of responsibility and instruction.

It is on the surgical side of the Hospital that you who are now entering the wards will first encounter the practical side of the profession you have adopted as your life's work, and the human material with which that work is to be carried out. It is as well that it should be so, for here the issues are clearer. Later will come the study of prolonged and progressive disease, of those degenerations which follow upon misspent lives or have causes still unknown, of failures rich in scientific interest, but at present beyond your power to remedy. You will meet much that is depressing. But during your first three months in a surgical ward you will find yourself in one of the most cheerful places in the world, where hope is the keynote, and hard active useful work your daily occupation.

For you who have chosen aright, this time will stand out with ineffaceable clearness for the rest of your lives. What has gone before has not been without interest, but the interest was academic. It was like the long drilling on Salisbury Plain, which made the raw recruits into the material of Kitchener's Army. The crossing of the Channel took them from make-believe to real war, the actuality for which all the drill had been a preparation. The rehearsal was over, the curtain was up. And so, in a surgical appointment, you are suddenly in the midst of real life. You are confronted with accidents, sudden infections, grave calamities. In the main it may be said of the patients whom you will encounter, that they are healthy, normal, sane individuals, struck without warning by some sudden misfortune. You are present at this crisis in their lives, and it is in your power to help in fighting it. There is something to be done; and when it is done it is your privilege to see the rewards of victory—the quick recovery and the return of hope.

There is another advantage of starting your career on the surgical side. You are introduced to disease in a comparatively simple form, and the knowledge of anatomy and physiology which is fresh in your mind enables you to grasp very much of what you encounter without the need of

lectures or text books. Very much of surgery deals with local disease, that is to say, there is one faulty structure in an otherwise healthy body. Given a thorough knowledge of anatomy and pathology the teachings of surgery become self evident. Surgical diagnosis is little more than the answering of two questions—what is the anatomical structure involved and what are the pathological processes that have caused the trouble? A man has thrust his arm through a window and a piece of glass has penetrated the forearm. The first question that faces you, "What structures would be encountered from without inwards if an incision were made in such a situation?" is one that you might reasonably be expected to answer in an anatomical paper. The second question, "Which of these structures has actually been divided?" means an investigation of the sensation of the different nerves, and the movements carried out by the muscles and tendons which lie in the path of the injury, and a search for pulsation in the arteries distal to the wound. The treatment is an exercise in anatomy and craftsmanship, very interesting, because the relations which you have memorised by force of will are now brought vividly before you under the bright light of the operating lamp. Your hardly acquired knowledge makes you not only a sympathetic fellow man, but one skilled to restore function and promise recovery to the patient.

During these three months you will work very hard, probably harder than you have ever done before, but it is all tremendous fun. Your primary duty to the Hospital is to keep a record of the cases under your care. This you will do as well as possible, both for your own sake and because on the accuracy and lucidity of your account will depend the value of the record in years to come should the same patient be readmitted or should a series of similar cases be investigated for statistical purposes. Besides clerking, however, you will be expected to help in every activity of the firm to which you are attached, from carrying patients to making tea in the dresser's room during "take-in." This appointment is your great opportunity for making yourself proficient. You should familiarise yourself with the somewhat elaborate routine of modern asepsis. You should take every opportunity to watch the dresser looking after your cases, for in the next appointment you will be a dresser yourself, and will be expected to know your work. It is the privilege of the beginner to ask questions, and this you should do in season and out of season. All knowledge which you acquire will stand you in good stead as a dresser, and as a dresser you will have more work to do yourself and less opportunity to learn by watching that of others.

You will go to bed very tired, and you will find little time to read. Do not therefore make any attempt to work through a surgical text book, but read up your own cases carefully. True surgical knowledge is part of your own self, and is based upon a memory of individual cases followed through and committed to memory. To be thus remembered each case must be a clear cut picture; therefore begin at once to form the habit of definite decision. At this stage it is far better to be certain than to be right. To begin with, you will have but little knowledge, but with what knowledge you have examine each case, make a definite diagnosis, and decide what treatment you would adopt. Whether the outcome proves you right or wrong, you will remember it, and you will have learned something in the process. But if you allow yourself alternatives you may be tempted to the complacent reflection that one of them at least was right. Any man who could remember all his mistakes would be the wisest surgeon in England at the age of 60.

Be interested in everything, in your patients and your fellows; no less in the nursing which completes the cure than in the operation which initiates it. It is an old saying that the wise doctor treats the patient as well as the disease. Enter into human relationships with your patients. They will call you doctor and will hang upon your words, and there is much you can do to make them well besides ministering to their surgical wants. In this side of your work alone you will learn much that will help you to success in later life. At Guy's we are particularly fortunate in our patients. There is no foreign quarter in the Borough, no shifting population. British dockers, navvies, carters, factory hands and their wives and children, come into our wards to be made well. They are fine people and proud of living round the best hospital in England. Their happiness and our good name are in your hands.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.

THE MEDICAL & DENTAL CURRICULA

A. The Dental Curriculum.

THE Dental Student is supplied at the Medical School Office with the Prospectus, Standing Orders, List of Instruments, Calendar and Clubs' Union Book.

These pamphlets should be carefully read in order that acquaintance may be made with the general arrangements of the School and the scope of the work upon which the student will become engaged.

Notices regarding the time and place of Lectures are to be found posted up by the main entrance of the Dental Department.

Instruments having been purchased at a dental depot, the student should satisfy himself that he has been supplied with all of those described in the hospital list.

It is inadvisable to purchase instruments before they are required. Instruments for prosthetic work are required for the B.D.S. course at the commencement of the second year, and for the L.D.S. course at the commencement of the first year. Clinical instruments are required for the B.D.S. course at the commencement of the fifth year, and for the L.D.S. course at the commencement of the third year.

Among the various depots at which instruments may be purchased are the following: The Amalgamated Dental Co., Broad Street, Golden Square, W.C., and 16, St. Thomas's Street, S.E.1; and Dental Manufacturing Co., Alston House, Newman Street, W.

The course of study for the B.D.S. London covers a period of five years, of which the first year consists of Physics, Inorganic Chemistry and Biology. The second year is occupied with the study of General and Dental Anatomy, Physiology, Pharmacology and Dental Prosthetics. The study of these subjects is also continued in the third year, together with Pathology, Bacteriology and Surgery. Clinical work in the wards, Surgery, Medicine, Anæsthetics, Pathology and Bacteriology, together with Dressership in the Extraction Rooms, Dental Metallurgy and Dental Prosthetics constitute the fourth year's work, and the fifth year is occupied by purely Dental subjects, these being Clinical work in the Conservation Room, Orthodontics, Operative Dental Surgery and Dental Surgery and Pathology.

L.D.S. students who come under the New Regulations must pass the Pre-Medical Examination in Chemistry and Physics before they can commence their four years' course. Subsequently, their first term is devoted to Dental Mechanics and Dental Metallurgy, and it is very important for the student to get a good grounding in the former at this early stage. In the remainder of his first year and the first term of his second year, the student studies Human Anatomy and Physiology in addition to continuing his work in the Dental Mechanics Laboratory. The rest of his second year is occupied by the completion of his training in Dental Mechanics and attendance at the Lectures on Dental Anatomy.

Third year students for the L.D.S. commence the Clinical courses with a period of probationary work upon the phantom head. The 'operative course, conducted by a Staff demonstrator, is very comprehensive. It includes most of the operations that the student will subsequently be called upon to perform upon patients, namely, gold and other fillings, crowns, inlays and the treatment of devitalised and septic teeth. These operations upon the dummy form an excellent ground work in operative dentistry.

Thereafter the course of work consists in holding and diligently carrying out the work of the following appointments: *Probationer Dressership in the Conservation Room; *Dressership in the Conservation Room; *Dressership in the Children's Department; Dressership in the Ordinary Extraction Room; Dressership in the Gas Extraction Room; Casualty Dressership; Clerk to Anæsthetist.

*Courses on Gingival Hygiene, local anæsthesia, and fourth year demonstration in operative dental surgery will also be attended.

A student, apart from those holding the post of Assistant Dental House Surgeon, is not allowed to work in the Conservation Room unless he holds one of the appointments marked *.

The time varies, according to whether the course for the B.D.S. or L.D.S. is being taken, at which a student will come into actual contact with Hospital patients, but he should always endeavour to be puntual in his appointments with them. There is nothing more irritating and annoying to a patient than to be kept waiting unnecessarily; it also delays to a very great extent the easy working of the Department.

Further, the student should remember that the cultivation of a courteous and gentle manner towards all patients will become in the future probably the greatest asset in his private practice.

Dental students will profit by following the practice of the Special Departments of the Hospital, *e.g.*, Eye, Throat, Ear. They will also have numerous opportunities of observing the more remote effects of dental disorders in the General Wards and Out-Patient Department.

Students in difficulties about their work and needing advice are invited to consult the Dean, Sub-Dean, Senior Dental Officer or any other member of the Staff, who will be pleased to do what they can to promote the interests of students.

B. The Medical Curriculum.

1. The Sciences.

BIOLOGY

THE Biology course is primarily intended to be the student's introduction to the science of medicine, and must be regarded as the study of living things in many forms and from various aspects rather than the accumulation of facts about a number of plants and animals. In other words, it is intended as a training in the acquisition of a point of view rather than a stock of facts. Incidentally also, the student learns a language which is largely his means of expression afterwards. The practice of the Biological Laboratory should give him a faculty in the use of scalpel and scissors and a knowledge of methods of preparation and staining of tissues which are the arts of the Dissecting Room and the Histological Laboratory. Lastly, a thorough acquaintance with the vertebrate types should be a great help to him in obtaining an intelligent knowledge of human anatomy.

Cases of instruments are placed on view which include all those afterwards required in the Dissecting Room. A microscope is needed from the beginning, and the student is warned against buying an instrument which will be a handicap to him throughout his career. The difference in price between a good and a bad instrument is only a few pounds. All secondhand microscopes should be submitted to the Demonstrators for inspection and examination of lenses before the purchase is completed.

CHEMISTRY AND PHYSICS

The student is often tempted to regard the study of Chemistry and Physics as one of very little use when once his preliminary examination is passed, but he will find in his study of the sciences of Physiology, Pharmacology and Pathology that a proper understanding of Physical and Organic Chemistry and Physics is invaluable and essential. That this is so is now fully recognised in the London University curriculum, which should be carefully studied by every London student.

The matriculated student will, in his first year, study Inorganic and Physical Chemistry, Physics and General Biology, and at the end of this period, provided he has worked diligently in the laboratories, and attended the Lectures and Revision classes regularly, should have no difficulty in passing the First Examination for Medical Degrees. In his second year he will study Organic Chemistry, together with Anatomy and Physiology, and at the end of the second winter, provided, as before, that he has worked steadily from the commencement, should have little difficulty in passing the First Part of the Second Examination for Medical Degrees. Anatomy, Physiology and Pharmacology are then taken as the Second Part of this Examination at the close of the third winter, prior to commencing Clinical work in the wards.

From Medical and Dental students who are preparing for the Premedical Examination only six months' work is required, but those entering without previous knowledge of Chemistry and Physics will find that time hardly sufficient, and are usually advised to take the full "year" of three terms, or nine months.

The importance of practical work cannot be too greatly emphasised, and lectures and books can but supplement work done in the laboratory. Guy's men have no excuse for neglecting laboratory work. Students are strongly urged to form early the habit of spending their spare hours, apart from those officially allotted, in one or other of the laboratories. Reading should be left for the evening. After a day in the laboratory, reading a good text book will be found to give ample scope for thought. "Cramming," or the memorising of words and phrases, without a knowledge of the corresponding realities, is one of the worst intellectual habits a student can acquire, and in the long run invariably leads to failure.

ANATOMY

The primary object of dissecting is to render oneself familiar with the structures of human

anatomy and their relationships one to another. A good knowledge of human anatomy is essential to the medical student, owing to the great scope for application of this knowledge which is provided by medicine and surgery, and it is no exaggeration to say that the better a man knows his anatomy the more likely is he to succeed in these subjects. By handling and tracing the structures exposed in dissections, the student is enabled to form mental pictures which greatly exceed in value the plates and diagrams to be found in books, and it cannot be emphasised too much that the knowledge obtained by dissecting is more thorough, more lasting and more definite than the knowledge obtained by text books, however good the latter may be.

In addition, dissecting trains the fingers and develops the sense of touch and that delicate muscle sense which is so necessary to aid the eye in carrying out a delicate manipulation.

The basis of anatomical knowledge is a thorough acquaintance with the bones. These can only be learnt by handling the bone and making out each point on it as the description in the book is being read. Hence, it is very desirable to possess a half skeleton. (This may be had from Mr. Walker, the Senior Assistant in the Anatomical Department, who will also supply cases of instruments.)

Full use should be made of the Specimen Rooms and of the famous collection of Wax Models in the Gordon Museum. The latter are quite unique and of great value to the student who is revising his work.

Men who intend to take the Primary Examination for the Fellowship of the Royal College of Surgeons should attend both the course of Lectures for senior students in the second winter session—for time, *vide* notices—and also the special class for the Primary Examination.

Books and Instruments

The student requires a Manual of Practical Anatomy, in which the structures are described as they are exposed in the course of dissection. The best book for this purpose is Cunningham's *Practical Anatomy* (3 vols., 12*s*. 6*d*. each); it should be read before, during and after each day's work.

In addition a text book of Human Anatomy, in which the subject is described by systems, is necessary. Gray's and Cunningham's text books are both good.

Men who think that they may want to take the Primary Examination for the Fellowship of the Royal College of Surgeons will require a book dealing with Embryology and Morphology, and they will find that Keith's book on the subject contains all that is essential.

The following instruments are necessary: Three scalpels, two pairs of *dissecting* forceps, and two sets of "hooks." No other instruments are required.

Dental Students

The detailed knowledge which is demanded of the medical student is essential for the dental student only as regards the head and neck and the bones of the skull. Special demonstrations are arranged each term suitable to the requirements for the L.D.S. and B.D.S. Examinations.

PHYSIOLOGY

Physiology, which forms the basis upon which scientific medicine, surgery and midwifery rest, will require the most earnest attention on the part of the student during the short space of two years which he can devote to it, and he will find that his understanding of the medical, surgical and pathological problems which he will meet later on varies directly with the thoroughness of his physiological ground work. Some elementary works on the subject, such as Huxley's *Elementary Lessons in Physiology*, or the smaller works by B. Moore and Foster and Shore, should be read in order to obtain a general knowledge of the scope of the subject.

The student should attend the Lectures on Physiology—for times, *vide* notices—and also the tutorial classes, which are held by the demonstrators. During this time he should read the subject in some text book such as Starling's *Principles of Human Physiology*, Halliburton's *Handbook of Physiology*, or Howell's *Text Book of Physiology*. While attending the practical classes held during the winter, the student is advised to read *Practical Physiology* (published by Arnold).

Physiological Clinical demonstrations for senior students are held each week.

Candidates for the M.B. of London or other Universities must in addition attend the class in Advanced Practical Physiology, held twice a week during the second winter session, and this class should also be attended by men working for the first F.R.C.S. examination.

Those desirous of obtaining a wider knowledge should supplement the course of reading indicated above with original papers in the *Journal of Physiology*, with parts of *Recent Advances in Physiology and Bio-Chemistry*, edited by L. Hill; *Principles of General Physiology*, by W. M. Bayliss; and Leathes' *Problems in Animal Metabolism*. Revision classes are held by the Demonstrators during the two months preceding the first F.R.C.S. and the M.B. examinations, and should be attended by all candidates.

A special course is held for candidates for the Honours B.Sc. of the University of London.

2. The Medical and Surgical Wards.

MEDICAL WARDS

TO each medical ward clerk is allotted a certain number of beds, and he is expected to examine and write full reports on all patients who are admitted into these. Occasionally, it so happens that a patient is too ill to be examined except by the House-Physician and Physician, or that a case dies before the ward clerk has had an opportunity of seeing it. Under these circumstances he should obtain the history and an account of the symptoms, physical signs and progress of the case from the House-Physician, and should base his report on these data. It cannot be too strongly insisted that a report, however brief, must be written on every case, and it is of the greatest importance that *the diagnosis and remarks made by the Physician should be entered at once into the report.* Moreover, any errors detected by the Physician or Registrar in the original report should be immediately corrected. In the event of a patient dying, the ward clerk must obtain the abstract of the post-mortem findings and carefully enter it up, and it need hardly be said that all clerks should make every effort to see the post-mortem examination of any case they may have seen during life.

The medical wards are open to clerks from 10 till 12 noon, and from 1.30 till 6.30 in the evening. The Registrars begin their rounds at 10.30, and by that time a clerk should at least have full notes of the history of any new patient who may have been admitted into one of his beds, and he should have a full report in readiness for the Physician in the afternoon. Ward clerks should realise that they are expected to know the details not only of their own cases, but of every patient under their Physician. It is no excuse to plead ignorance because "this is not my case." If only a clerk will take the trouble to make himself conversant with each case in this way he will find at the end of his six months that an enormous amount of clinical material has passed through his hands, and he will probably have acquired enough knowledge of medicine to enable him to pass the Conjoint Final with but little additional reading. But so many men waste their time through sheer laziness in the medical wards, never realising that they are throwing away experience which would prove invaluable to them later on.

Again, the curriculum provides but six months for the study of pure medicine, whereas nine months are allowed for the pursuit of surgical appointments. Further, during their period of medical clerkship men are apt to take more time than is justified for the study of Pathology and Bacteriology, which they have neglected whilst in the Surgical Wards.

An hour spent in the wards after tea three or four times a week will give opportunities not only for going over cases and writing up reports, but also for seeing the House-Physician tap chests and abdomens, etc. The treatment, too, which each case is receiving, may well be studied at this time.

With the present shortage of beds no opportunity of gaining clinical experience should be missed, and many of the most interesting and important medical cases can be seen at Out-Patients. Nothing is more valuable than seeing the new Out-Patients, writing up their history, examining them and making a diagnosis before they are seen by the Physician.

As regards reading, the best method is to study the text book account of each disease as one comes across it in the wards or in discussion, and afterwards to compare, if possible, the text book description with the symptoms and signs presented by the patients. At the same time the most important medical journals should be read regularly, for by this means only can the student keep himself in touch with modern work. The *B.M.J.* and the *Lancet*, the *Quarterly Journal of Medicine*, as well as the *Journal of the American Medical Association*, are especially recommended.

Books that may be recommended are the following: The well-known text books by Osler and Dr. Poulton's revised edition of Taylor, *Medical Diagnosis* by Latham and Torrens, and *Physical Diagnosis* by Cabot. For second three months ward clerks, the most important monographs in Allbutt's or Osler's *System of Medicine* and Campbell Thompson's *Diseases of the Nervous System* will prove valuable and interesting reading. For laboratory work Hutchinson and Rainey's *Clinical Methods*, or Dr. French's book will be useful.

SURGICAL WARDS

The appointment of surgical ward clerk is the first of the appointments held by the student during his Clinical training. In many ways it is the best of all the appointments, as most of the teaching, both by the Surgeon and the Registrar, is for his special benefit. Furthermore, a reputation for keenness and ability earned in those early days will follow him and help him throughout the rest of his time at the hospital. Each clerk is attached to one of the surgical units for three months, and it is his duty to record the history and progress of the cases allotted to him.

The wards are open to the student at 10 o'clock, and he should have written up the history of the case and, as far as possible, have examined the patient before the Registrar of the unit begins his round at 10.30, when each case is discussed

and the report of the clerk confirmed or amplified. The student during this period will do well to confine most of his attention to the detection of the physical signs, and should procure from the Medical School Office a copy of the red book entitled *Instructions in Case-Taking, Surgical*, which he will find a very good guide to sound and systematic examination of the patients.

While he is acting as ward clerk the student attends a course in Elementary Pathology and Pharmacology, and at the same time has unrivalled opportunities of seeing dressings and operations, more especially during his "take-in" week. There will be much hard work and many late hours, but there will be also incalculable compensation in seeing and learning the practical points that will stand him in good stead. He is doing his own work of ward clerk, but must remember that he is learning also to be a dresser.

As a dresser the student spends two periods of three months. While the surgical work is very dependent on the dresser for its smooth efficiency and good results, the dresser must realise that he himself is very dependent upon his work, for it is during these six months that he lays the foundation of his surgical knowledge and sound aftercare. Someone has said that every surgeon should be his own dresser, so that the dresser must appreciate the responsibilities that he assumes in thus deputising for his surgeon.

We have said very little about the actual tasks of the dresser; he should read the "standing orders" relative to his appointment, and from then on everything depends upon himself. He has been given a valuable appointment and one difficult to do well, but one that repays hard work almost more than any other appointment he can hold.

3. The Obstetric and Gynæcological Wards.

AFTER finishing appointments in the Medical and Surgical wards the student is posted to the Obstetric Department for six months. During the latter half of this time he is also attached to the Physician for the Diseases of Children. The Obstetric Dresser is responsible for case-taking in the wards and at Out-Patients, assists at operations, and during one month acts as Extern in the Maternity Charity. The Department has 26 beds reserved for gynæcological cases and 21 for the reception of cases presenting complications in pregnancy, labour and the puerperium and normal labours.

As an intervening link between the Obstetric and Children's Departments is the Salomons Centre, in which the health of mothers and infants is fostered by the practice of preventive medicine. The scope of the work done outside the wards is indicated by the fact that 2,163 attendances were recorded at Obstetric Out-Patients, while 2,025 women were attended in confinement in their own homes.

With this wealth of clinical material it should be possible for every student to obtain a sound knowledge of methods of diagnosis and treatment founded on no small experience. It is, however, recognised by teachers of Gynæcology and Obstetrics that this desideratum is not always attained. It is undoubtedly true that many a young practitioner has to admit a regrettable ignorance of the ailments which afflict his female patients and of the proper management of the pregnant, parturient and lactating woman. And these subjects form the foundation upon which a successful family practice is built. Responsibility for this sad state of affairs hardly rests with the student, but he will do well if he starts his clinical work with the firm determination to avoid the pitfalls that beset his feet. He must realise that practical experience in diseases peculiar to women cannot be acquired in the space of the three months which he will spend in Queen Ward. As he passes from one appointment to another he must resist the tendency to develop the compartmental mind and must endeavour to cultivate a wide outlook on medicine as a whole.

The study of the physiology and pathology of the functions of woman should be begun at the outset and continued throughout the period of clinical training. The man starting as Surgical Ward Clerk should include among his initial purchases a text book on Gynæcology, for purposes of reference, and should make a point of attending the Lectures of the Obstetric Surgeons. He should also avoid no opportunity of acquiring the "tactus eruditus" so essential to the accurate diagnosis of pelvic disorders; the inherent impossibility of permitting a class of students to examine women patients one after the other renders it imperative that this experience be gained over a considerable period of time.

The study of midwifery he may well leave until he becomes an Obstetric Dresser; the art of the accoucheur cannot be learnt from books.

4. Pathology and Bacteriology.

PATHOLOGY

WHEN the student has passed the Second Conjoint or M.B. Examination, he is halfway through his medical curriculum, and he should have gained a working knowledge of the functions of the body in health. This knowledge is an essential preliminary to the study of the most important of the medical sciences, viz., Pathology, or the study of the functions of the body in disease. Throughout his life the student, if he continues to study and practise medicine, must ever keep pathology in the foreground. It is desirable, therefore, that the study of pathology be begun as soon as possible and continued throughout a medical career.

The subject is an exceedingly large one, and it is customary to divide it into several sections :—

1. General Pathology ;
2. Morbid Anatomy ;
3. Morbid Histology ;
4. Bacteriology ;
5. Chemical Pathology.

Due attention must be paid to each of these branches.

During the Autumn, Winter and Spring Terms systematic Lectures and Demonstrations in Pathology and Bacteriology are held. Three Lectures and three practical Demonstrations are given weekly. The practical Demonstrations take place at 9 a.m. and the Lectures at 12 noon. Regular attendance at these classes is most desirable, and the attractions of the wards and clinical work should not be allowed to interfere with laboratory studies.

Classes and Demonstrations in Chemical Pathology should be attended during the tenure of the post of Medical Ward Clerk.

It is essential that throughout all ward appointments no opportunity should be missed of continuing the study of pathology. Every man should as far as is practicable follow out the pathology of each and every one of his cases. Is a bacteriological investigation made ? He should follow it as far as possible. Is a portion of tissue removed for miscroscopical examination ? He should see the section. Is a chemical examination demanded ? He should try and see the analysis carried out He should never miss an autopsy on any one of his cases. He should read up each case as he meets it. Set hours cannot be given for these lines of study ; they must be fitted in as time and opportunity permit.

Efforts should be made to see as much practical work and as many demonstrations in pathology as can be arranged. There are very few days when no pathology can be learnt. Post-mortems are held nearly every day—Monday, Tuesday, Wednesday, Thursday and Friday at 1.30 p.m., and Saturday at 11.30 a.m. Attendance at these will amply repay the time expended.

Informal classes in Pathology are held three times weekly during the October and May terms. These, though primarily intended for M.B. students, are suitable for, and should be attended by, those sitting for Part I of the M.B.Cantab. and the Final M.B. of Oxford or London University.

During the later clinical appointments certain students may hold a few pathological posts, such as Student Demonstrator, Assistant to the Demonstrators of Morbid Anatomy, Student Assistant in the Bacteriological Department. One or more of these may be held in turn, and they prove exceedingly valuable from the learners point of view.

There are many books which might be recommended, and what suits one may not prove attractive to another. MacCallum, *Text Book of Pathology* ; Pembrey and Ritchie, *General Pathology* ; with Muir and Ritchie, *Manual of Bacteriology*, should prove an adequate combination for most purposes. Other books which may suit other tastes and those which are good are : Adami, *Principles of Pathology* ; Adami and Macrae, *Text Book of Pathology* ; Green, *Pathology*. For morbid history, Grunbaum's *Essentials of Morbid Histology* may be recommended.

When the information in these books proves inadequate, as it is sure to do occasionally, some of the articles in Allbutt and Rolleston *System of Medicine* may be consulted or references to original papers may be obtained from the work and from the bibliography in MacCallum's *Text Book of Pathology*.

BACTERIOLOGY

Bacteriology, although for a time regarded by the clinician as affording information of merely academic interest, has now made a most profound impression upon the theory and practice of both medicine and surgery, and by providing specific treatment for many microbial infections has emphasised the necessity and stimulated the demand for exact diagnosis, and it is towards this direction that the student's interest is guided by the class in Practical Bacteriology.

Particular attention is devoted from the first instance to the technique of various investigations undertaken in connection with ward work. Thus the student himself examines sputum, pus and morbid exudates by various methods to demonstrate the associated bacteria. He is instructed

in staining methods and the practical work of culture making, and is, moreover, encouraged to repeat for himself during the intervals between successive classes any observations and experiments previously carried out, in order to equip him for the performance in general practice of those more obvious methods of bacteriological diagnosis which experience has shown are both reliable and valuable. Demonstrations are also given upon the life history of the most important of the organisms which are pathogenic to the human race, and by the study of "pure cultures" an attempt is made to impress the chief characteristics of each upon the mind of the student, whilst the changes such organisms undergo or produce when they gain entrance to the human tissues are carefully emphasised.

Throughout the course considerable stress is laid on the further applications of bacteriology to treatment, including the use of various remedial agents such as sera and vaccines, which have been elaborated in the bacteriological laboratory for the treatment of disease, together with those facts and theories relating to natural and acquired immunity upon which bacteriological therapy is based.

5. The Special Departments.

THE CHILDREN'S DEPARTMENT

In-Patient Accommodation—Dr. Cameron has under his care 14 cots in the Children's Ward. On two days in the week, at present on Tuesdays and Thursdays at 2 p.m., Dr. Cameron goes round the ward and gives clinical instruction.

Out-Patient Department—Children under 10 years of age are seen in the Children's Department at Out-Patients on Mondays, Wednesdays and Fridays from 9.30 until 1 o'clock. Dr. Cameron attends on Mondays and Fridays at 10 a.m., when clinical instruction is given.

The Salomons Centre for the care of the mothers and children of the Midwifery Charity is now completed.

OTO-RHINO-LARYNGOLOGICAL DEPARTMENT

This Department is organised on the unit system. There are two units, one under the care of Mr. Mollison, the other of Mr. Layton. Patients are seen in the Out-Patient Department, admitted when necessary to the special wards, Dorcas and Christopher, and returned to the Out-Patient Department. This arrangement allows members of each unit to follow up the cases. Mr. Mollison's firm sees out-patients on Tuesdays and Fridays at 11.30 a.m. and on Mondays at 9 a.m.

Dressers are appointed to the respective firms, and have every opportunity of becoming expert in the technique of examination of the ear, nose and throat, and of gaining experience in diagnosis and treatment. Large numbers of school children are seen. Minor operations are performed in the Out-Patient Department; these include, amongst others, operation for the removal of nasal and aural polypi, and of tonsils and adenoids, and for the lavage of the maxillary antrum; these operations are performed under the supervision of the Surgeon or the Clinical Assistant.

Twenty-seven beds and six cots are now allotted to the Department, and each firm operates twice a week. Mr. Mollison and Mr. Layton "take-in" during alternate weeks, and emergencies are admitted under the care of the firm on duty.

THE OPHTHALMIC DEPARTMENT

The Ophthalmic Department of the Hospital is in charge of the three Ophthalmic Surgeons. They are helped by three Assistants, one House Surgeon and Dressers. The Dressers are appointed four times a year for a period of three months, and assist the Surgeons at Out-Patients and at operations, and are responsible for the recording of the cases both in the wards and at Out-Patients. The Ophthalmic Department is an open field for any student to explore as far as he is willing and able, the amount of clinical work being sufficiently great for him to see all the more ordinary and common diseases of the eye in the space of three months.

The student will soon find that he is quite unable to form any opinion of his own on an ophthalmic case until he has mastered the use of the ophthalmoscope and can readily and accurately decide what is the refraction of the eye, and if the "fundus oculi" is healthy and normal. The theory of retinoscopy can be taught and is simple; the practice, however, requires constant application by the student before he can hope to obtain any sort of facility in it. The difficulties are mainly initial ones, and any time and trouble expended in mastering them will well repay any man in after life when he has qualified and is in practice.

MEDICO-NEUROLOGICAL CLINIC

The arrangements for the Medico-Neurological Clinic for the Winter Session are not finally settled, but they will be approximately as follows:—

(1) *Advanced Ward Teaching for Post-Graduates only at 2 p.m.*—Tuesday, Dr. Hurst, Dr. Ryle and Dr. Symonds, combined (Medico-Neurological) round.

(2) *Clinical Demonstrations at 12 noon*—On Tuesdays Drs. Hurst, Ryle and Symonds will demonstrate selected cases in the Clinical Theatre each week in rotation.

(3) *Out-Patients*—Medical, Thursday, Dr. Ryle; on Wednesdays and Saturdays, Dr. Symonds and Dr. Gillespie deal with Neurological and Psychological cases respectively.

(4) *Elementary Teaching*—Fridays at 2, Dr. Hurst; Tuesdays and Saturdays at 10, Dr. Ryle; Thursdays at 10 (in Eye Ward), Dr. Symonds.

THE DERMATOLOGICAL DEPARTMENT

Out-Patient Days — Tuesdays, New Cases, 9.30 a.m. (children); 10 a.m. (adults). Old Cases, 1.30 p.m.

Thursdays, New Cases, 9 a.m.; Old Cases, 9.30 a.m.

Wards—There are three male and three female beds in the Eye Wards for Dermatological cases requiring careful supervision or treatment in bed.

Instruction in the diagnosis and treatment of diseases of the skin is given in the Out-Patient Department, and clinical demonstrations on selected cases are held from time to time.

THE GENITO-URINARY AND ORTHOPÆDIC DEPARTMENTS

These two appointments are now taken together, and have a common House Surgeon. Students acting as Dressers in the Genito-Urinary Department have excellent opportunities of acquiring knowledge which will be useful to them in actual practice and examinations. Out-Patients are seen on Tuesday and Friday afternoons.

The Department has 7 male in-patient beds in Christopher, 2 female beds in Queen, and 1 cot in Evelyn.

Students should realise that their attendance at this Out-Patient Department, though not compulsory, is very necessary, as is evidenced by the very advanced state of disease in which some patients arrive for examination.

The Orthopædic Department comprises a large out-patient clinic and 19 beds devoted to patients suffering fron deformity. Out-patients are seen on Monday and Wednesday afternoons, and Plasters only on Friday afternoon, and in the Out-Patient Department the student will meet with every variety of deformity, congenital and acquired. Considerable facilities are afforded for experience in the relief and cure of all chronic diseases of bones, joints, muscles, etc. Instruction in the principles and most modern practice in the use of appliances, plaster technique, and the more useful forms of physio-therapy is given by Mr. Trethowan, the Orthopædic Surgeon, and Mr. Lambrinudi, the Orthopædic Registrar. Numerous operations of a minor nature are done. such as manipulations for stiff and painful joints, correction of misshapen and ricketty limbs, correction of scoliosis and immobilisation of tuberculous joints.

The in-patient beds are devoted to the most serious operative cases, such as extensive tendon transplantations, correction of malunited fractures, bone-grafting, the making of new joints, etc. Guy's is a pioneer hospital in possessing an excellent workshop for the manufacture of every form of splint and appliance.

It is in the Orthopædic Department that the principles underlying the mechanical disabilities of the limbs and spine are emphasised and their explanation made clear, and the experience to be gained here is invaluable. The great utility of orthopædic surgery has become evident to very many during the war.

THE MASSAGE DEPARTMENT

The New Department is now in full working order, and patients are treated between the hours of 2.30 p.m. and 4.30 p.m. on Mondays, Tuesdays, Thursdays and Fridays, and between 9.30 a.m. and 12 noon on Wednesdays and Saturdays.

The point of interest to Medical Students is to see the work carried out on patients by Massage and Medical Gymnastics. A large variety of cases are being treated daily, which include fractures, stiff joints, dislocations, nerve injuries and disease, lung and heart disease, congenital conditions and poor development in children, etc.

THE TUBERCULOSIS DEPARTMENT

The Tuberculosis Department is a reference Department for out-patients suffering from diseases of the chest. Patients attend on three days a week, Tuesday and Friday afternoons, and Wednesday evenings. For suitable cases arrangements are made for admission to sanatoria. The patients return to the Out-Patient Department after leaving the sanatorium. The Department provides extensive opportunities for studying methods of investigating early and doubtful cases of pulmonary tuberculosis, also for observing special forms of treatment such as artificial pneumo-throax. A special appointment is being started shortly in connection with this Department.

THE DEPARTMENT FOR VENEREAL DISEASES

This Department, which was reorganised and greatly enlarged a year ago, is now open from 9 a.m. to 8 p.m. on all week days, and from 10 to 12 noon on Bank Holidays.

Treatment is carried out for all venereal diseases in women, men and children, and patients may be referred from other departments at any of these times.

The total number of attendances during the last twelve months was 35,000.

Students may attend the male section any evening from 5 p.m. to 7 p.m., and Dressers in the Gynæcological Department may attend the female section on Mondays from 5 p.m. to 7 p.m. or Wednesdays from 2 p.m. to 5 p.m.

Demonstrations are held on Thursdays at 5 p.m. in the Demonstration Theatre in this Department.

Five Dressers are appointed to the Department every three months.

PRACTICAL PHARMACY, MATERIA MEDICA, AND DISPENSING

One of the many important things all medical students must know is how to write a prescription. It may even be necessary for the majority, when qualified, to be able to dispense the same. All students, therefore, would be well advised to acquire as much knowledge of the subject as they can.

The student is taught, practically, how to dispense the different medicinal preparations; he learns to write prescriptions, due regard being paid to doses and incompatibilities.

The recognition of crude drugs, their active principles and preparations form part of the course, which is conducted by the Hospital Pharmacist and covers the syllabus of the Practical Pharmacy of the Conjoint, the Intermediate M.B. Lond., the Third M.B. Camb., and the first M.B. Oxford.

ELECTRICAL AND ACTINOTHERAPEUTIC DEPARTMENT

The treatments carried out in this Department include the following: Diathermy, high frequency, the application of the constant, faradic and sinusoidal currents, radiant heat, and static electricity, treatment by the Finsen and mercury vapour lamps and radiotherapy.

A special Department has recently been opened for artificial sunlight treatment.

A large number of cases are treated in the Department: Chronic joint conditions, nerve injuries, wasted muscles, skin diseases such as ringworm, psoriasis, eczema and rodent ulcer. There are also a large number of cases of malignant disease undergoing treatment with X-rays and radium.

6. Books.

THE student who wishes to obtain his books at once should not take the first he sees on any particular subject, but would be wise to consult his demonstrators first. Another source of guidance in the selection of one's books are the numerous reviews which appear in every number of the GAZETTE. These should be studied, since for the most part they deal with the latest books available on any medical subject, and in themselves furnish information of current interest and value.

Facilities have recently been made for students to buy the *Guy's Hospital Reports* at reduced price. In these *Reports* the student will find articles written for the most part by members of the Staff of this Hospital, and representing all that is most distinctive in Guy's teaching.

The number of text books is very large, and the choice is a difficult matter to the inexperienced. Roughly speaking, second-hand books are very seldom worth anyone's while to buy, chiefly because medical science is progressing so rapidly that new editions are constantly being published.

The number of publishers of books for medical students is great. Messrs. Churchill publish Taylor, Jacobson, Goodhart, Fagge and many other well-known works. Messrs. Macmillan publish Allbutt, Foster and a great number of first year books; Messrs. Longmans, Green & Co. publish the famous *Gray's Anatomy*. Mr. H. L. Lewis, 136, Gower Street, publishes a number of medical books, and has also a medical circulating library which is invaluable to students who wish to see all the latest books. Mr. Murray also publishes many well-known medical books, as also do Smith, Elder & Co., Phillip & Son, Cassell & Co., Nisbet & Co. and Baillière, Tindall & Cox.

All books can be obtained from Mr. H. H. Grattan, in Borough High Street, who is the "Official Bookseller" to the Hospital. Many well-known books he can supply over the counter; any others desired he will have in an hour or two.

Guy's Hospital Gazette.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Guy's Hospital Chapel.

THE Chapel at Guy's certainly does not thrust itself ostentatiously upon the notice of the newcomer, but it exists nevertheless. Those who boldly open the door under the clock in the front square will find it. It is embedded in Matron's House, which flanks it on either side and covers the roof as well. It is square, without an apse, and with galleries round three sides, being technically described, we believe, as a "drawing room Chapel of the Georgian Period." An impression of a sort of apse, indeed, has been artificially and undesignedly created by the erection of an organ in one corner and a vestry in the other. This has the disadvantage of partially obscuring the design of the Colonnade, which was clearly intended to be a feature of the building. It is possible that these encroachments will be removed in the execution of a scheme of redecoration and improvement which is afoot. The stained glass windows commemorate William Hunt, the founder of the Medical Wards. The mosaics and panels are a memorial to all those who have died in the Medical Service of the Hospital since 1867.

Various others are recalled by brasses in various parts of the Chapel and in the Lobby. The most interesting of these are those of W. E. Gladstone, a Governor for 63 years, Sir Astley Cooper, and Sir William Gull. But the best known feature of our little Chapel is the really noteworthy monument to our Founder, Thomas Guy, which faces the altar. Here is Guy in Court dress of the period relieving a suffering man, while in the background is to be seen an actual model of the Quadrangle and Colonnade Steps outside, with porters engaged in stretcher bearing. The inscription on the monument is well worth studying as a good example of the somewhat florid testimonials which characterised such literature in the Eighteenth century, and as a record of certain facts apt to be forgotten.

An extensive crypt contains the Founder's tomb, for the remains of Thomas Guy were translated across the street from their original resting place beneath St. Thomas's, where they lay from 1725 to 1780. Among the other tombs in the crypt are those of William Hunt, Sir Astley Cooper and certain Governors, Surgeons and Physicians of bygone days. Of those who served the Chapel the greatest name is that of Frederick Denison Maurice, Chaplain 1836–46, portraits of whom will be found in the Lobby. A list of the services in the Chapel will also be found there, and the Chaplain is always glad to supply further information. Needless to say, the Chapel and its Services are always open to all members of the Hospital and Schools.

Guy's Physiological Society.

President—M. S. Pembrey, M.A., M.D., F.R.S.
Hon. Secretary and Treasurer—A. Nelson Jones.

THE Physiological Society meets about once a fortnight during the winter session to discuss subjects of physiological interest. All past and present students of the Hospital are eligible for membership. Almost every man studying Anatomy and Physiology becomes a member, and so popular are the meetings that many men doing first year work or clinical work find it worth while to attend.

On the afternoon of a meeting—usually on a Tuesday—tea is served free to all members in the Physiology Laboratory, and the meeting itself is afterwards held in the Physiology Theatre. First, a member reads a paper on a subject dealing with "Physiology or the Allied Sciences," and then the paper is discussed by other members in the whole-hearted manner characteristic of this Society. The subjects discussed during the last session were :—

"Eugenics."
"The Physiology of Muscular Exercise."
"The Clean Milk Problem."
"The Physiology of Alcohol."
"Functions of the Stomach."
"The Capillary Circulation."
"The Mechanism of the Kidney," and
"The Life of the Cell," with special reference to the "Chromosome Theory."

It is at these meetings that many Guy's men learne to make their first halting remarks in public, and the man who undertakes to read a paper finds his labour well rewarded by the experience he gains in gathering information and moulding it into a concise and interesting paper.

The advantages of membership are that at these meetings modern work on physiological subjects is presented in a very palatable form, and the discussion of broader biological problems such as "Eugenics" at least makes a man acquainted

with problems on which at some time he will be expected to form an opinion.

The annual subscription of 3*s*. 6*d*. entitles men to the privilege of membership, and prospective members should attend the Annual General Meeting, which is held in October. Notices of all meetings are posted in prominent places in the Hospital and Medical School a week before the meeting.

A. N. J.

Guy's Hospital Christian Union.

THIS being essentially a Fresher's Number of the GAZETTE, we would commence by offering a hearty welcome to all who come new to the Hospital this session.

The Hospital is a very large place and it takes some men a considerable time before they realise themselves to be part of it. But in no better way can that realisation come than by the recognition of a single purpose running through all their activities—work, sport or anything else. They are in training for a profession more often called upon than almost any other to give healing to the sick in soul as well as to the sick in body. And let us notice that this is no thing that a doctor may evoke or not as he will. Spiritual service is not a useful but non-essential appendage to the rest of a doctor's activities—it is the greater and the more essential part of his life. This must be stated dogmatically here. Its truth can only be proved by experience. We think our lives crowded enough. A qualified man has very much less time than we have, so let us now, while we can, search and search with energy and see if there be any truth in that consolation which many a patient later on will crave from us.

It would not be too bold to say that there are no men who have not at some time thought about religion—their position in relation to God. And there are very few perfectly honest and sincere atheists. Then, why if the vast majority believe in the existence of God, are many outwardly indifferent and inactive? History shows with no uncertainty that a man in search of God must expend much energy and must have certain times especially set apart for that and that alone. And that for the commonsense reason that with the distractions of ordinary life around us all the time we cannot see and hear the things of the unseen and inaudible world around us. And here is one answer to our question—time and energy are the commodities of which we have the least reserve, and so, in the effort to keep pace with life, we so more than easily lose sight of that which in the nature of things can alone give meaning to life.

Now the Guy's Hospital Christian Union has existed for the last 80 years to help men to find that time and energy. In 1847 Dr. Habershon, one of the physicians, founded the Union for Bible study. In 1853 Dr. Golding Bird was mainly responsible for the foundation of the Medical Christian Association for London medicals. In 1909 the Guy's Union was revived after five years quiescence and affiliated to the Student Christian Movement of Great Britain and Ireland. This is but one of 28 national branches of the World's Student Christian Federation, whose total student membership is 300,000. The object of the Federation is "To lead students to accept the Christian faith in God, Father, Son and Holy Spirit, according to the Scriptures, and to live as true disciples of Jesus Christ." It is entirely undenominational.

There is no space here for an account of the past year's activities of the Union. It will be found in the *Clubs' Union Year Book*.

We commence this term, as usual, with the Fresher's Meeting. This will be held on Tuesday, October 4th, in the Committee Room of the Medical School. You reach this by making for the Medical School Office on the first floor, and, instead of turning into the Office, continuing straight along the passage. It is the door facing you at the far end. Tea will be at 4.30 p.m., and after about 20 minutes there will be an informal address. The speaker will be announced later.

On Thursday, October 13th, there will be the first of the ordinary weekly meetings. They are to be held every Thursday from 5 to 6 p.m. in Room 42—Mr. Roche's room—in the College. The College is reached by leaving the Hospital grounds through the War Memorial Arch, crossing the road and going through the arch gateway of the dark red brick building opposite. Room 42 is in the far right-hand corner of the building and on the second floor. Just walk in and if you find yourself in a bedroom look for the other room, numbered 42, which will be the sitting room.

If Freshers will look in the letter rack in the Colonnade they will find individual invitations. The term Fresher's Meeting is not meant to imply that only Fresher's are invited. Students of any year will be welcome.

So to return to the point—time and energy. We offer this one hour a week for two reasons: Firstly, because a definite hour on the same day each week is most easily given. Secondly, because there is the added strength of corporate effort.

E.N.S.

Guy's Hospital Clubs' Union.

THE formation of the Clubs' Union, by the amalgamation of the various constituent institutions, took place in the summer of 1891. The objects of the amalgamation were to further the interests of the clubs and societies existing at the Hospital by their mutual support, and to simplify the collection of subscriptions. By the payment of an annual subscription—see *Clubs' Union Year Book*—to the Clubs' Union, any student of the Hospital can obtain the privilege of membership of the constituent institutions.

The Union comprises the following Constituent Institutions: Association Football Club, Athletic Club, Cricket Club, Debating Society, Dental Society, Gazette, Golf Society, Hockey Club, Lawn Tennis Club, Gymnasium, Physical Society, Rifle Association, Rowing Club, Rugby Football Club, Sailing Club, Students' Club and Swimming Club.

On joining the Union a student is entitled to take part in the activities of any of the above Constituent Institutions. The ground of the Clubs' Union is under the control of the Council, is situated close to Honor Oak Park Station on the Southern Railway, Brighton Section, and to Crofton Park Station, on the Southern Railway, South-Eastern Section. It is 9 acres in extent and is the headquarters of the Guy's Football, Cricket, Athletic and Lawn Tennis Clubs. A Fives Court, under the management of the Students' Club, is situated behind the Nurses' Home near the Swimming Bath, and arrangements are made for classes in Boxing, Fencing and Gymnastics in the Pavy Gymnasium. The Rowing Club is affiliated to the London Rowing Club at Putney, and members are entitled to all the advantages of that Club. Meetings of the Debating, Dental and Physical Societies are held from time to time in the College.

The membership subscription of the Union is 5 guineas per annum.

Extensive alterations have been carried out in the Students' Club to provide greater accommodation and comfort for the members, and are dealt with in a separate paragraph on the Students' Club.

At Honor Oak Park a new stand has been erected to seat 800 people, so that now with the two existing small stands there is seating accommodation for 1,000 people. It is hoped that improvements to the Pavilion will be commenced shortly.

As any student can see, these alterations in themselves necessitate an increase in the membership subscription. The Utopian ideal of a new Students' Club may even be yet realised in the future, thus adding another burden to the finances of the Union.

Membership cards are issued entitling the holders to the privileges of membership of each of the Constituent Institutions.

New members should consult the notice boards in the Colonnade for information as to the activities of the various clubs.

An excellent programme of home matches has been arranged by the Rugby Football Club—*vide* Fixture Cards—and it should be noted that free admission to the ground during matches at Honor Oak Park is granted only to members of the Union on production of their membership cards.

STUDENTS' CLUB

The premises of the Club include the Smoking and Reading Rooms and the Dining Hall in the College.

All three rooms have recently been redecorated, and, in addition, alterations have been carried out in the Dining Hall and the Smoking Room. It is hoped in this way not only to increase the accommodation, but also to expedite the service during meal times.

In the Reading Room the periodical cases have been renovated and the paper stands have been brought up from the Smoking Room, where they used to be in a state of decay.

A good supply of papers and periodicals is now maintained, and it is hoped that all members of the Club will assist the Committee by themselves seeing that the periodicals, etc., are kept in good order. The taking of periodicals out of these cases or the removal of papers from the Reading Room throws a lot of extra work on to the Librarian and members ought not to expect the Committee to keep up a constant supply of papers if these are continually removed as soon as they are placed in the Reading Room.

The Library in the Reading Room has also been thoroughly rearranged. A new catalogue has been made, and can be inspected at any time.

Notices are posted in the Reading Room stating the regulations of the Library, and students should avail themselves of this opportunity of a good supply of general literature, which for once has no connection whatever with medicine.

Through the Library books may also be obtained from Mudie's Library.

The attention of all members is drawn to Rule 20 of the Clubs' Union:—

"Every member whose subscription is more than one month in arrear shall be suspended from

the privileges of membership, and his name shall be posted in the Students' Club. After two months' default, if desirous of resigning his membership, he shall be required to submit his resignation in writing to the Secretary, and shall not be readmitted without the consent of the Council, who shall, if they think fit, impose a fine of 5*s*. upon his readmission."

A list will shortly be posted in the Students' Club of members who have failed to comply with the rules, and the Secretaries of Constituent Institutions will be notified that the members named are not entitled to the privileges of the Union until their subscriptions have been paid.

The Pupils' Physical Society.

Hon. President—Sir Charters Symonds, K.B.E., C.B., C.B.E., M.S.

Hon. Vice-Presidents—Sir William Hale-White, K.B.E., M.D.; Sir W. Arbuthnot Lane, Bart., C.B., M.S.; John Fawcett, M.D.; G. Newton Pitt, O.B.E., M.D.

Presidents—S. J. Abrahams, D. E. Dunnill, C. R. E. Freezer, R. E. Havard, W. F. Hudson, A. B. Kettle, S. C. H. Lane, O. Plowright, G. W. Rake, J. R. Rickett, E. H. Roche, E. M. B. West.

Hon. Secretaries—N. L. Eckhoff, F.R.C.S., M. McC. Baird, M.R.C.P.

THE Pupils' Physical Society is a direct descendant of the older Physical Society which was founded in 1771, and which was London's oldest medical society. The older organisation ceased to exist in 1852, partly owing to the competition of the Medical and Chirurgical Society, now the Royal Society of Medicine, which was founded in 1805. The Pupils' Physical Society was originally started in 1830 as a purely students' society for the discussion of subjects of medical and surgical importance, for the showing of interesting cases, and for the reading of papers. The functions of the Society are the same to-day as they were close on a century ago, and it cannot be too strongly emphasised that it is and always has been essentially a students' organisation. Its members are the members of the Clubs' Union. It is managed by a Committee consisting of not more than 16 Presidents, elected by the Society from the senior students and House Officers. The meetings, which in the coming session will be held on alternate Tuesdays, are presided over by one of these Presidents, who, apart from one of the Honorary Secretaries, is usually the only qualified man present. This point is stressed, because students are apt to think that the Society is designed for the benefit of qualified men and members of the Staff. Few of the former and none of the latter attend the ordinary meetings, which are particularly intended to give students an opportunity of discussing medical problems amongst themselves. The attendances have been rather disappointing of recent years, and it is hoped that the present session, the opening meeting of which will be held on Thursday, October 13th, will show a distinct improvement.

Medical men are particularly liable to be called upon to speak in public during their professional careers. Attendance at the Physical Society's meetings lays the foundations of a capacity to carry off what is to most people, especially the unpractised, a difficult and delicate task with some degree of distinction. Medical Societies, too, exist in all the larger towns and in many country districts. The experience afforded by the Physical Society enables a practitioner who has been assiduous in his attendances in his student days to take an active part in the work of such societies without developing an "inferiority complex."

Apart altogether from its uses as a training ground for public activities in later life, the Physical Society presents opportunities to students for acquiring a knowledge of medicine in a more congenial—and certainly equally valuable—manner than is provided by routine teaching and book work.

It is no exaggeration to say that the education of a Guy's man is incomplete unless he has regularly attended the clinical and pathological evenings of the Physical Society. There is no obligation on members to take part in the discussions, but those who do so derive greater benefit from the meetings than those who do not. In any case, those who come to the meetings have a chance of seeing a mass of clinical and pathological material which they would probably not see otherwise. "Experientia docet."

U. L. O. T. C. Camp, 1927.

AT the beginning of August the members of the Guy's Company of the U.L.O.T.C. Field Ambulance were easily distinguished from their fellow students by that special kind of complexion which, a well-known advertisement tells, always characterises handsome men. The company had, in fact, just returned from its annual camp, held this year on the South Coast at Seaford. It was four years since the O.T.C. had last camped there, and at that time Guy's had nine men in camp, this year 65 Guy's men were present.

In addition to the work of the unit there were many forms of entertainment when the day's work was over. The bathing was good and the nearness to the Downs afforded an opportunity to the more energetic to indulge in country walks. Although there were comparatively few shows in Seaford itself, Brighton and Eastbourne were easily reached by bus or car. On the evening of July 23rd the Medical Unit gave a dance for the residents of Seaford at the Drill Hall, which was kindly lent by the local Territorials, and on

Twenty-one men had leave off camp for various reasons, the total strength of the company being 86, which represents over a third of the total strength of the Field Ambulance.

The work of the unit included field exercises in conjuntion with the Infantry and Engineer units, lectures on medical work in its application to the Army in the field, and the minimum of drill necessary for handling a unit. On July 22nd the unit was inspected by Lieut.-Gen. Sir Matthew Fell, K.C.B., Director-General of Army Medical Services, who expressed great satisfaction at the work and efficiency of the Field Ambulance. In the evening the officers accepted an invitation to attend a smoking concert in the Sergeant's Mess, which was a great success.

July 27th the ladies of Seaford invited the Medical Unit to a return dance at the same hall. Both of these events were a great success.

On Thursday, July 28th, a rugger match was played on one of the local school playing fields between the Medicals and the combined Engineer and Infantry Units. The Medicals were able to turn out a strong team, including A. J. D. Lewis, C. D. Malone, W. D. G. Jones, D. S. Clogg, W. J. Radford and T. M. Calhaem. The Medicals won by 17–0, tries being scored by Wakely (King's) 2, Malone 1, Calhaem 1, Jones 1. Radford kicked a good goal. A 6*d.* gate was charged and £17 raised for the Sussex Hospital.

At the contingent sports, held at the Duke of York's H.Q., Chelsea, in May, Guy's teams won

the Tent Striking and Tug-of-War Cups for the Medical Unit. These Cups have now found a home in the "Spit," where we hope they will long remain.

We start the new academic year with just over 50 men, so need about 40 recruits to bring the company up to full strength. In view of the fact that the O.C. Medical Unit drew attention on parade to the strength of the Guy's company and suggested that the other hospitals might follow its example, we look with confidence to the Hospital to give its support, so that Guy's may continue to lead the way in this as in other Inter-Hospital activities.

N. F. C. B.
N. L. B.

Guy's Musical Society.

THE Hospital Musical Society, one of the younger and more humble of Guy's institutions, was founded in February, 1903, by the union of the Nurses' Choral Society with the Students' Glee Club, which had carried on successful but separate existences until that time. With such a good beginning, and with the assistance at the concerts of many of the members of the Staff and their families, and of a large number of nurses and students and their friends, there could be no doubt that the Musical Society had come to stay, and would have an interesting future. And such has been the case. From the first the Society has been noted for the sound way in which its financial arrangements have been carried out. It was at the very first meeting of the Committee of the newly-formed Society that it was decided, among other things, "That the Books of Words be sold and not given to the audience at the next Concert," and "That Books of Words bought before the night of the Concert be sold at threepence (3*d.*) each, but in the Concert Room at sixpence (6*d.*) each." Since that time, although the secretaries have nearly always been unqualified men, the treasurer has always been a really responsible person, usually a member of the Hospital Staff, and Mr. Mollison has ably filled the post for many years. We have also been very fortunate in that Dr. Fawcett has been President since 1923, and that the late Matron, Miss Hogg, was always very interested in the Society's activities and was a Vice-President and Chairman of the Executive Committee for several years.

From its beginnings in 1903 until the war the Society gave one or sometimes two concerts a year, which were always successful socially, and often financially as well. After our somewhat unfortunate concert held in May, 1914, at which there was a deficit of more than £10, it was decided "that the Secretary be requested to send all tickets for concerts in future to the wives of members of the Staff, and not to the members themselves." This was not able to be carried out, for no concerts were held during the war, and it was not until the autumn of 1919 that the Society again started its activities. Since then several concerts have been held, perhaps the most successful of which was in December, 1925, when some of Stanford's *Songs of the Fleet* and Coleridge-Taylor's *Hiawatha's Wedding Feast* were given. In February, 1924, the Gilbert and Sullivan operetta *Trial by Jury* was performed, and in the three years since then we have had *Iolanthe* in May, 1925, and *The Gondoliers* in November, 1926. Rehearsals were started in the spring of this year for the performance of *The Mikado*, which is to take place this winter, but were discontinued in the summer months. They will be starting again very shortly. New members, whether they have the graceful charm both of figure and voice that are required for the principal parts, or whether they are like you and I and prefer to stand in the back row of the chorus, will find themselves very welcome, and we think that they will enjoy themselves. The rehearsals are very good fun, and the enthusiastic audiences that gather at the Guildhall School of Music are nothing if not generous. The secretaries are Messrs. L. K. Wills and N. L. Barber, both of whom will be very pleased to give further information to intending new members.

W. F. H.

Rugby Football Club.

THE 1st XV commenced this season (84th) on September 17th with an away match at Coventry; the other fixtures are duly given below. The programme is a stiff one, and the home fixtures include teams of the highest reputation. The officers this season are J. R. F. Popplewell (capt.), W. H. Myburgh (vice-capt.) and W. D. G. Jones (hon. sec.). The club is indeed fortunate in its choice of officers, and more than fortunate in getting W. D. G. Jones to take on for the second year the heavy duties of hon. secretary. He is to be heartily congratulated on the splendid list of fixtures he has secured.

Both J. R. F. Popplewell and W. H. Myburgh are tireless enthusiasts, and with confidence we may look forward to a sucessful season under their inspiring leadership.

Not many men who took part in last year's Final have left. In fact, one or two only. The 2nd XV of last year have some men knocking hard at the door of the senior team, so that there need be no fear that the Hospital XV will be below the standard of recent years. Again, the new entry may bring us some experienced recruits.

The ground at Honor Oak Park is having new drainage put in, and everything possible is being done to render our playing pitch more suitable for those splendid games which our men will undertake in the ensuing months. We wish them every success, and we have every hope that by next March Popplewell will have so tuned up his men that he will once again retain for us the Cup which Cameron's team regained last season.

The charges for entrance to the covered stand at Honor Oak Park have been revised. For the 8 matches starred * the covered stand will be charged 1*s.* 6*d.* entrance; all other matches 1*s.* The uncovered stands 6*d.* all matches. The 2nd XV matches, entrance 6*d.* and stands 6*d.*

1*st XV Fixtures*, 1927–28

Sept.	17	Coventry	Away
„	24	Catford Bridge	Home
*Oct.	1	Gloucester	Home
* „	8	Llanelly	Home
„	15	Bristol	Away
* „	22	Harlequins	Home
„	29	Old Blues	Home
*Nov.	5	London Scottish	Home
* „	12	Coventry	Home
„	19	Blackheath	Away
„	26	Northampton	Away
Dec.	3	Richmond	Away
„	10	Aberavon	Away
„	17	Old Alleynians	Home
„	21	U.S. (Portsmouth)	Away
„	31	O.M.T.'s	Home
Jan.	4	R.A.F.	Home
„	7	Devonport Services	Home
* „	14	Birkenhead Park	Home
* „	21	Aberavon	Home
„	28	Gloucester	Away
*Feb.	4	Newport	Home
„	7	2*nd Rd., Hospital Cup*	
„	11	Rosslyn Park	Home
„	15	Cambridge University	Home
„	18	Plymouth Albion	Away
„	23	*Semi-Final Hospital Cup*	
„	25	Birkenhead Park	Away
Mar.	7	R.A.F.	Away
„	10	Bedford	Away
„	17	England *v.* Scotland	Twickenham
„	21	*Final Hospital Cup*	
„	24	London Irish	Away
„	31	Old Leysians	Away

Association Football Club.

THE prospects of the Soccer Club for the coming season are bright. There are seven of last year's eleven remaining, and this, together with a hoped-for goodly supply of "new blood," gives very good reason for hoping to build up a really strong eleven. Full backs are most urgently needed, as there has been a scarcity of them at the Hospital for some time.

D. B. Smallshaw has been elected as captain for the second year in succession, and if his advice —even though it be somewhat vociferously administered—is given and taken to with no worse advantage than that of last year, we can, with very good reason, look forward to him mounting the steps and again receiving the Cup.

The past season is one on which the Soccer Club can look back with a good deal of satisfaction, for, indeed, what could afford more satisfaction to the club than winning both the Senior and Junior Inter-Hospitals Cups? From the point of view of "wins and losses" the 1st XI, although registering more wins than losses, was not quite so successful as was anticipated. It is very gratifying to find, however, that the 2nd XI reached a very much higher standard than it has done for some years.

It is a hard blow that three such men as L. S. Williams, J. White and H. A. Ginn have left us. Each has done excellent work for the Soccer club, while special mention must be given to Williams. For seven years he has rendered valiant service to the Hospital, and in almost all these seasons he has headed the list of goal scorers. Let it therefore be sufficient incentive to those who fill the places vacated by these to maintain the standard set by them.

There is to be a full trial on September 28th and another on October 12th, and it is hoped that both old and new players will quickly fill the list for names in the Colonnade and show as much keenness as possible in order to repeat last year's successes and allow both the Soccer Cups to rest in peaceful respose at their present abode in the "Spit."

Golfing Society.

President—H. C. Cameron, Esq., M.D., F.R.C.P.
Captain—J. A. Vernon.
Hon. Secretary and Treasurer—E. C. Duffett.

Resume

THE Society has been very active this season and they are unlucky in not being able to record victories in more of their matches. We have, however, several new members, but if our activities, as we hope, are to be increased again next season we must have many more members to replace those who must of necessity leave us at the end of this season.

The feature of the season has been the introduction of two Staff matches. For this we are indebted to Mr. Bromley and to the Staff for taking so much trouble to make work vanish for two afternoons. In the first match, played at Sudbrook Park, our President, Dr. Cameron, was able to play, but he was unfortunately away from the second match. The students were successful in the first match by 9 matches to 5 matches and in the second by 10 matches to 6 matches, having had a lead of one match only in the singles.

Further activities were extended to club matches with Sidcup, Shortlands and the Hastings Medico-Dental Society. A fixture with Dulwich was, unfortunately, scratched.

In our first match with Sidcup we were beaten by 6 matches to 3 matches. The home club put put a strong team, and the result was by no means discouraging.

A return match was played at West Kent, and we were beaten by one match only, the result being Sidcup 5½ matches, Guy's 4½ matches. Our visit to Shortlands again showed that we must concentrate our efforts on match play and accustom ourselves to playing after a day's work and on a strange course. Shortlands were victorious by 8 matches to 5 matches.

At Hastings we certainly met our Waterloo, when our hosts won the day by 12 matches to 2 matches.

In spite of these reverses the standard of play has been good throughout and the team and the prospects for the Inter-Hospital Cup, which has yet to be contested, are very favourable.

Besides matches, the Society holds certain competitions during the season.

Dr. Cameron has very kindly renewed his prize this year, and competitions were arranged, which proved a great success.

The Staff of the Hospital have presented a Cup which is played for annually by match play under handicap. The winner is entitled to hold the Cup for a year, and in addition receives a replica. On the first Wednesday in every month there is a competition, Medal and Bogey alternately, the winner receiving a silver spoon.

The Society still needs more members, and it is hoped that many new members will join us not only to replace those who must of necessity leave at the end of the season, but also to add to our numbers, which at present are all too small.

Notices of the Society's activities are posted in the Colonnade, and any further information can be obtained on application to the honorary secretary.

Inter-Hospital Cup

In the first round we have drawn the holders, St. Thomas's, but the date of play has not yet been arranged.

Competitions and Matches

Monthly Spoons—
December, 1926—W. J. Cotton, 89—8=81.
January, 1927—H. J. Croot (24), 3 up.
April, 1927—W. J. Cotton (8), 1 up.
May, 1927—J. A. Vernon, 91—12=79.
July, 1927—E. C. Duffett (12), 3 down.
August, 1927—L. B. Langmead, 97—12=85.
September, 1927—P. H. Lomax (9), all square.

Dr. Cameron's Prize

18 *Holes Scratch*—J. A. Vernon (12), 86.
18 *Holes Handicap*—J. A. Vernon, 86—12=74.
18 *Holes Foursomes*—O. Ive and H. J. Croot, 93—11=82.

Matches

Staff Match, won by Students, 9 matches to 5 matches.
Staff Match, won by Students, 10 matches to 6 matches.
Shortlands, lost by 8 matches to 5 matches.
Sidcup, lost by 6 matches to 3 matches.
Sidcup, lost by 5½ matches to 4½ matches.
Hastings Medico-Dental Society, lost by 12 matches to 2 matches.

Staff Challenge Cup

Owing to the large number of entries the play for this Cup has not yet been completed.

Handicaps

Handicaps are allotted by the Society to members returning two cards, and revision of handicaps are made when necessary.

For all competitions held by the Society members must play off their lowest club handicap.

Next Season

Fixtures are being arranged with the following clubs and societies for the new season: The Staff, Sidcup, Shortlands, Dulwich, Hastings Medico-Dental Society, St. Leonards Golf Club.

There will also be the usual Monthly Competitions

Hockey Club.

THIS season we have an even better Fixture List than last season, among them being Surbiton, R.M.C. Sandhurst, Staff College, Lincoln College, Oxford; Clare College, Cambridge; and most of the important hockey schools within reach.

Having obtained these fixtures it is necessary to retain them; this can only be done by enthusiasm of the players and support of other students, particularly at Cup Ties. There is room for improvement in both, especially the latter, as is instanced by our six supporters at last year's Cup Final, while St. Thomas's had about one hundred. This apathy makes it most difficult for the Hockey Club, which is endeavouring to enter first class hockey and thus attract good players.

Owing to the kindness of Nestanglo Sports' Club, we are having the same ground as previously. There is a new caterer this year and there will doubtless be an improvement in the quality of teas provided.

F. E. Camps succeeds J. E. Willett as captain, and C. A. W. Archer is vice-captain and H. O. Lyne honorary secretary.

Final medical and dental examinations due soon will probably derive us of several of our best players. I urge all students, new and otherwise, who have played or would like to start to join the Hockey Club. We have such a long list of fixtures that they can be certain of many games. Will those who intend to play, and who have not already put their names on the list, give their names to the secretary as soon as possible?

Tennis Club.

President :—J. Fawcett, Esq., M.D.

Captain :—H. Trafford.

Hon. Sec. and Treas. :—G. M. Housden.

THE Tennis Club has now completed a very successful programme for 1927, and a brief resumé of the main features of the season is desirable. The first "six," under the captaincy of H. Trafford, were again successful in retaining the Senior Inter-Hospital Cup by defeating St. Thomas's Hospital in the Final at Roehampton by 8 matches to 6. We were fortunate in having the services of P. D. B. Spence who, besides being personally responsible for four of our victories, did much to inspire the team with confidence by his presence.

In Club matches the Six were unfortunate in having no less than seven matches scratched on account of bad weather. Of the eighteen matches that were played, fourteen were won and only four were lost.

A varied fixture list included matches with Eastbourne, Surbiton, the House of Commons, and Lord Hamilton's VI.

The Second Six were again in the final of the Junior Inter-Hospital Cup for the third successive year, but were not successful in winning it. They were beaten by St. Thomas's Hospital by eight matches to seven after an extremely interesting match. Twenty-three club matches were played, of which twelve were won and eleven lost.

The keenness displayed for the Club and its activities during the summer was very great. Over eighty entries were obtained for the Lane-Washbourne Singles Cup, which was won by H. C. van den Broucque, who defeated R. B. Pearson in the Final by 6—1, 6—1, while over twenty members took part in the Annual Mixed Tournament which was held in June.

Early in October the Annual General Meeting of the Club will be held. The date of this will be posted shortly in the Colonnade, and it is desirable that all those interested in Lawn Tennis will be present. It is hoped that all those interested in Lawn Tennis *will* be present. It is hoped that our President, who is resigning at the end of this Season, will be able to come and take the chair. Especially do we want all those men, new to the Hospital, to come to the meeting and make themselves known to the Hon. Sec. In this way his task will be lightened by getting to know what new talent he may expect for the teams next season. So watch for the notice of the meeting in the Colonnade and keep the date free.

Students' October Entry, 1927.

Name	*Course Medical or Dental*	*Year*	*School or College*
Betts, V. P.	Dental	Pre. Med.	Perse School, Cambridge.
Binns, T. P.	Medical	2nd Year	Nottingham High School.
Brotherton, R. F.	Dental	1st Year	East London College.
Brownlie, R. W. D.	Dental (also Medical)	1st Year	Highgate School.
Bruce, R. S.	Dental	Pre. Med.	Bishops Stortford College.
Brummitt, G. B.	Dental	1st Year	Deacon's School, Peterborough.
Bunyan, J.	Dental	2nd Year	Dover County School.
Burton, G. C.	Dental	1st Year	William Ellis School, Hampstead.
Carleton-Eckhert, L.	Medical	3rd Year	University of Toronto Medical School.
Clare, F. W.	Dental	1st Year	Landisfarne College, Westcliff.
Croudace, H. T.	Medical	1st Year	Maritzburg College, Natal.
Crowther-Smith, E. H. de B.	Medical	2nd Year	Haileybury College.
Edwards, L. R. L.	Medical	1st Year	Rhyl County School.
Evans, A. J.	Dental	1st Year	Pwllheli County School.
Evans, T. W.	Dental	1st Year	Jones' West Mon. Secondary School.
Evelyn, L. H.	Dental	1st Year	Hurstpierpoint College.
Flament, W. L. R.	Medical	1st Year	St. Edmund's College, Ware.
Fry, J. C.	Dental	Pre. Med.	Leighton Park School, Reading.
Garrus, N. H.	Medical	4th Year	Marlborough College and Magdalene College, Cambridge.
Gavin, T. A.	Medical	1st Year	Dulwich College.
Gibbons, A. W.	Medical	1st Year	Cheltenham College.
Gilchrist, K. J.	Medical	2nd Year	Dulwich College.
Green, C. B.	Dental	Pre. Med.	Brentwood School, Essex.
Hills, T. H.	Medical	1st Year	Uppingham School.
Hines, R. N.	Dental (also Medical)	2nd Year	University College School, London.
Holman, A. W.	Dental	1st Year	Whitgift Grammar School.
Ireland, T.	Dental	1st Year	Spennithorne College, Barrow-in-Furness.
Jones, E. H.	Medical	1st Year	Uppingham School.
Jones, J. W.	Medical	2nd Year	Christ's College, Cambridge.
Jones, W. W.	Medical	2nd Year	Caterham School.
Lean, S.	Medical	1st Year	Kelly College, Tavistock.
Levy, I.	Medical	1st Year	Chelsea Polytechnic.
Locke, A. E.	Medical	1st Year	Peter Symonds' School, Winchester.
Mahon, R. E. M.	Medical	1st Year	Rugby School.
McArdle, M. J. F.	Medical	2nd Year	Wimbledon College.
McGregor, D.	Medical	1st Year	Charterhouse School.
Ogle, W. L.	Medical	1st Year	Felsted School.
Peatfield, S. R.	Dental	1st Year	Cranleigh School.
Pilcher, M. W.	Dental (also Medical)	1st Year	Epsom College.
Popplewell, T. D.	Dental (also Medical)	1st Year	Chelsea Polytechnic.
Protheroe, T. S.	Medical	1st Year	Southport College.
Pugh-Jones, E.	Medical	Pre. Med.	Stanhope School, New Cross.
Ratcliff, R. A.	Medical	4th Year	Rossall School and King's College, Cambridge
Rayner, G. R. C.	Medical	3rd Year	Worksop College, Notts.
Redman, H. J.	Dental	Pre. Med.	Wellington School, Somerset.
Rees, D. J.	Dental	1st Year	Llandovery College.
Rees, H. P.	Dental	2nd Year	Cardiff University.
Reid, R. G.	Medical	2nd Year	Leys School, Cambridge.
Roberts, G.	Medical	1st Year	Ackworth School, Pontefract.
Rose, W. F.	Dental	Pre. Med.	Strand School, Elm Park, S.W.
Russell, H. P.	Dental	1st Year	East London College.
Ryan, D. F.	Medical	2nd Year	Downside and Christ's College, Cambridge.
Scott, K. L.	Dental	Pre. Med.	Christ's College, Blackheath.
Sharp, J. R. S.	Medical	1st Year	Northampton School.
Smith, S. B.	Medical	2nd Year	Sir George Monoux Grammar School, Walthamstow.
Sparling, H. F.	Medical	1st Year	Westminster College of Pharmacy.
Steward, G. V.	Medical	4th Year	Haileybury and Cambridge University.
Stoll, L.	Medical	2nd Year	Raine's Foundation School.
Timpson, J. H.	Dental	1st Year	Bancroft School, Woodford.
Turner, S. W. N.	Dental	Pre. Med.	Oundle School.
Vine, R. S.	Medical	1st Year	Boys' High School, Southend.
Weiner, T.	Dental	Pre. Med.	Richmond County School.
Williams, J. D.	Dental	1st Year	City of London School.
Wilson, G.	Medical	Pre. Med.	Christ's College, Blackheath.
Wootton, G. R.	Dental	2nd Year	Peter Symonds' School, Winchester, and Acton County School.

GUY'S HOSPITAL MEDICAL SCHOOL.

TIME TABLE. WINTER TERM, 1927.

SUBJECTS FOR FINAL EXAMINATION. MEDICAL.

Subject	Lecturer	Days and Times	Place	First Class or Lecture
Applied Anatomy	Professor Johnston	Wednesdays at 12 noon.	Demonst'n Theatre.	Wednesday, October 5
Forensic Medicine	Dr. Ryffel	Thursdays at 4.30 p.m.	Class Room 3	Thursday, October 6
General Pathology		Lectures. Tues., Thurs. and Fridays at 12 noon. Practical. Daily at 9 a.m.	Pathol'cal Theatre Path'cal Class Room	Tuesday, October 18 Wednesday, October 19
Medical Pathology	Dr. Marshall	Tuesdays at 4.45 p.m., and Thursdays at 12 noon.	Museum	Tuesday, October 11
Surgical Pathology	Mr. Davies-Colley	Mon. and Thurs. at 4.45 p.m.	Museum	Monday, October 10
Operative Surgery	Mr. Hughes	Mon. and Fri. at 12 noon.	Op. Surg. Class Rm.	Friday, November 18
Ophthalmology	Mr. Ormond	Tuesdays, 9.15 to 10 a.m.	Pathological Th'tre	Tuesday, October 4
Radiology	Dr. Lindsay-Locke	Fridays at 4 p.m.	Anatomical Theatre	Friday, October 21

ORGANIC CHEMISTRY, ANATOMY, AND PHYSIOLOGY.

Subject	Days and Times	Place	First Class or Lecture
Organic Chemistry (2nd M.B. Part I.)	Lectures. Weds. & Fridays 9.30 a.m. Practical. Mons. & Thurs. 10-1 p.m.	Chemistry Theatre Chemistry Laboratory	Lectures. Friday, September 30 Practical. Thursday, September 29
Anatomy	Elementary Lectures. Mons. 9.30 a.m. Weds. 11 a.m. Senior Lectures. (Embryology.) Tues. and Thurs. at 9.30 a.m. Revision Classes. To be announced later Practical Anatomy. Daily from 9.30 a.m. to 5 p.m. Primary F.R.C.S. To be announced later Normal Histology. Tues. & Thurs. at 2 p.m.	Anatomical Theatre Anatomical Theatre Demonstration Theatre Dissecting Room Demonstration Theatre Histology Laboratory	Wednesday, September 28 Tuesday, October 4 To be announced later Tuesday, September 27 Monday, September 26 at 2 p.m. Thursday, September 29
Physiology	Elem. Expt. (All Junior Students.) Fri., 11-1 p.m. Sat., 10 12 noon. Adv. Chem. (Senior M.B. Students.) Mons. and Weds., 11-1 p.m. Clinical Physiology (All Students). Thurs. 12-1 p.m. Tutorial Classes, Elementary. (Junior Medical Students.) Advanced. (All Senior Medical Students.)	Experimental Physiological Laboratory Chemical Physiological Laboratory Clinical Theatre To be arranged at a General Meeting of Medical Students attending courses in Physiology, to be held in the Physiological Theatre on Friday, September 30th, at 10.30 a.m.	Friday, September 30 Monday, October 3 Thursday, October 6

CHEMISTRY, PHYSICS AND BIOLOGY.

Course	Subject	Lectures	Place	Practical Classes	Place
Pre-Medical Conjoint	Inorganic Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Tues., Oct. 4th at 9.30 a.m.	Chemistry Theatre	Tues. & Thurs. 2-5 p.m. First Class, Thurs. Sept. 29th at 2 p.m.	Chemistry Laboratory
	Physics	Tues. & Thurs. 10.50 a.m. and Tues. at 12 noon. First Lecture, Thurs., Sept. 29th at 10.50 a.m.	Class Room IV.	Mons. 10-1 p.m. and 2-5 p.m. First Class, Mon., Oct. 3rd.	Physics Laboratory
Conjoint	Biology	Weds. 9.30 a.m., Thurs. 12 noon, Fri. 9.30 a.m. First Lecture, Fri., Sept. 30 at 9.30 a.m.	Anatomical Theatre	Mons. & Fridays 2-4 p.m. First Class, Mon., Oct. 3rd at 2 p.m.	Biology Laboratory
M.B. London	Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Tues., Oct. 4th at 9.30 a.m.	Chemistry Theatre	Mons. 10-1 p.m., Tues. 2-5 p.m. First Class, Mon., Oct. 3rd at 10 a.m.	Chemistry Laboratory
	Physics	Tues. & Thurs. 10.50 a.m., & Tues. at 12 noon. First Lecture, Thurs., Sept. 29th at 10.50 a.m.	Class Room IV.	Thurs. & Fridays 2-5 p.m. First Class, Thurs. Sept. 29th at 2 p.m.	Physics Laboratory
	Biology	Weds., 9.30 a.m., Thurs., 12 noon, Fri., 9.30 a.m. First Lecture, Fri., Sept. 30th at 9.30 a.m.	Anatomical Theatre	Weds. & Fridays, 10.30-1 p.m. & Sats. 11-1 p.m. First Class, Fri., Sept. 30th at 10.30 a.m.	Biology Laboratory

GUY'S HOSPITAL DENTAL SCHOOL

TIME TABLE—WINTER TERM, 1927

Subject	Lectures	Place	Practical	Place
CHEMISTRY	Tuesdays and Thursdays at 9.30 a.m., commencing on Tuesday, October 4th	Chemistry Theatre	Tuesdays and Thursdays at 2 p.m., commencing on Thursday, September 29th	Chemistry Laboratoy
PHYSICS	Tuesdays and Thursdays at 10.50 a.m., and Tuesdays at 12 noon, commencing on Thursday, September 29th	Class Room IV.	Mondays from 10 to 1 p.m., and from 2 to 5 p m., commencing on October 3rd.	Physics Laboratory
DENTAL METALLURGY	Mondays, Wednesdays and Fridays at 12 noon, commening on Wednesday, September 28th.	Chemistry Theatre	Thursdays at 2 p.m., commencing on October 13th,	1st & 2nd Years' Laboratory
DENTAL MECHANICS ...	Mondays at 2.30 p.m., commencing on Monday, October 10th.	Anatomical Theatre	Fridays at 1.45 p.m,, commencing on October 7th.	1st & 2nd Years' Laboratory
ANATOMY	(1) Junior Lectures :— Mondays at 9.30 a.m., Wednesdays at 11 a.m., commencing on Wednesday, September 28th (2) Demonstrations :— *(a) Bones *(b) Soft Parts On days and at hours to be announced later	Anatomical Theatre Anatomical Demonstration Theatre	Daily from 9 a.m. to 5 p.m., commencing on Tuesday, September 27th	Dissecting Room
PHYSIOLOGY	Thursdays 10.30 a.m., commencing on Thursday, October 6th.	Physiology Theatre	Thursdays at 11 a.m., commencing on October 6th.	Physiological Laboratory
HISTOLOGY	Tuesdays at 11 a.m , commencing on September 27th.	Histology Laboratory		
PATHOLOGY	Times to be announced later	Pathological Theatre	Times to be arranged	Pathological Class Room
DENTAL ANATOMY ...	Fridays at 12 noon, commencing on October 8th.	Physiological Theatre		
DENTAL HISTOLOGY ...	Mondays at 2 p.m., commencing on October 7th.	Physiological Theatre	Mondays at 2.30 p.m., commencing on October 10th.	Biology Laboratory
GENERAL SURGERY ...	Tuesdays at 2 p.m. Thursdays at 3 p.m. Fridays at 1.15 p.m. Commencing on Thursday, October 6th.	Class Room IV. Physiological Theatre Clinical Theatre		
DENTAL SURGERY ...	Mondays at 4.15 p.m., commencing on October 3rd.	Anatomical Theatre		

* N.B. New Regulation L.D.S. Students in their Second Term of Human Anatomy must attend (a), and may attend (b) if they so desire.

Old Regulation L.D S. Students and New Regulation Students in their Third Term of Human Anatomy must attend both (a) and (b).

Correspondence.

DEAR SIR,—I beg to bring to your notice some interesting additions to the "GAZETTE Museum of Guy's Antiquities" which, I feel sure, will be of interest to all Guy's men.

Presented by C. H. Golding Bird, Esq.—

(1) "Teddy Cocks," puncture per rectum instrument.

(2) Pedley's Interdontal Wire Splint Instrument for fractured mandible.

(3) John Hilton's Amputation Instruments.

Presented by C. Gordon Roberts, Esq.—

(1) An old fashioned "Medicine Spoon," for use on refractory babies. Usually used when administering castor oil.

(2) An old form of Dental Key.

(3) Dental Forceps, which was probably used for children.

Presented by Ernest F. Clowes, Esq.—

An old Admission Card, issued to Mr. Wm. Clowes in 1829.

Presented per Medical School Office—

(1) An old fashioned china Feeding Bottle.

(2) University of London Gold Medal for Master of Surgery, awarded to L. A. Dunn, 1888.

(3) Box of old Instruments, being the Anatomical Prize of 1834 at Guy's Hospital, presented to John Blackburn, Esq., by Bransby B. Cooper, Esq.

The Museum has recently been thoroughly renovated and a new upright case has been erected to accommodate the ever-increasing number of exhibits.

In future the Museum will be open to visitors from 9.30 a.m. to 5 p.m., and all interested in these exhibits are cordially invited to pay a visit.

I am,

Yours truly,

GEO. A. WINSTON,

Acting Curator.

The Wills Library,
Guy's Hospital, S.E.1.
September 15th, 1927.

Reviews.

The Methods of Clinical Diagnosis. By A. G. GIBSON M.D., F.R.C.P., & W. T. COLLIER M.D., M.R.C.P. Published by E. Arnold & Co., 1927. Pp. 398. *Price* 12*s*. 6*d*.

THE trend of modern medicine in the direction of special laboratory investigations for the diagnosis of disease has, to a considerable extent, ousted purely clinical methods of diagnosis.

In the methods of clinical diagnosis Dr. Gibson and Dr. Collier have made a notable endeavour to point out the value of clinical methods in the elucidation of disease. The study of clinical methods, as the authors point out, teaches the student two things—how to observe and how to interpret. It is to educate the student to observe that this little manual has been written.

The preliminary chapters indicate the methods available and the general features of the patient, and due emphasis is placed on the taking of a good history before any examination of regions is made.

In the chapter on cardio-vascular system we prefer to feel that thrills are indicative of stenosis and are so excessively rare in mitral and aortic incompetence as to be neglected for all clinical purposes.

The gastro-intestinal system is accurately and concisely discussed, but more space could have been devoted to the recognition of the "acute abdomen," where surely the diagnosis and indications for immediate operation rest entirely on the clinical findings.

The diagnosis and localisation of lesions of the central nervous system are tedious and difficult, but the methods advocated will undoubtedly prove of considerable value and assistance to the student. The chapters are well written and the subject matter is well chosen and arranged.

The remaining systems are described in turn and attention directed to the eyes, ears, nose and throat as possible sources of disease or to furnish additional clinical evidence of disease elsewhere.

We commend especially the chapter on the examination of children, which, although making no attempt to describe the diseases of children, indicates exceedingly well the methods of examination and the signs to expect in sick children.

The book closes with a chapter on Clinical Pathology in which available laboratory methods are concisely and accurately tabulated.

The Methods of Clinical Diagnosis will prove of especial value to the student commencing his clinical work in the wards for whom the early recognition of the importance of clinical medicine cannot be too strongly emphasised.

Ker's Manual of Fevers. Revised by CLAUDE RUNDLE. 3rd Edition. Published by Oxford Medical Publications, 1927. *Price* 12*s.* 6*d.*

IN its new edition this well-known book retains to a great extent the original form, although recent advances in serological diagnosis and treatment have been included. The Schick Test in diphtheria and the Dick Test and serum treatment for scarlet fever have been clearly described.

It is a little disappointing to find that a manual from such an authoritative source should not be written on rather more generous lines. The accounts of the specific fevers given present little more than those to be found in any text book of general medicine, and one feels that the author had much more to say of practical value both to the student and practitioner.

There is little to criticise in the subject matter, but the diet suggested for a febrile patient which is outlined in the chapter devoted to typhoid fever conjures up unpleasant memories of three weeks on a similar regime. The importance of abundance of fluid is duly emphasised, but one would have liked to have heard less about milk and more about an adequate supply of carbohydrate and the importance of stimulating the salivary glands.

The Effects of Contraception Practices on the Female Sexual Organs. By F. J. MCCANN, M.D., F.R.C.S. Pp. 16. Published by Simpkin, Marshall, Hamilton, Kent & Co., Ltd. *Price* 1*s.*

THIS pamphlet has been produced under the auspices of the League of National Health, of which Dr. McCann is the President. The objects of the League are "to combat the theory and practice of contraception (birth prevention), to oppose any form of State or Municipal assistance for the promotion of contraception and to uphold the honour and blessing of parenthood."

The pamphlet first appeared in the April number of the *Catholic Medical Guardian,* and is therefore written with acknowledged propagandist intent. Dr. McCann's dislike of contraception has resulted in his assigning most of the gynæcological ailments from which women suffer to this source. Attributed to contraceptive practices by Dr. McCann is a syndrome to which he has given the title "The Malthusian Uterus." This syndrome consists of "a slight uniform enlargement of the uterus with uniform softening of the cervix and body, increased loss of blood at the menstrual periods, increased mucoid discharge during the menstrual intervals, together with a certain amount of backache and discomfort. There is likewise an anxious drawn appearance in the woman's face through the fear of the failure of the contraception methods and fear of pregnancy." Thickening of the Fallopian tubes also occurs in the Malthusian uterus, "while there are doubtless changes in the ovaries which will be discovered by further research, but meantime lutein cysts are occasionally produced as a result of contraception, and probably also fibrotic or sclerotic changes."

In the July number of the *Catholic Medical Guardian* will be found a devastating criticism of Dr. McCann's paper by Dr. F. M. R. Walshe. This criticism is in part a plea for intellectual honesty. It is difficult for human beings to believe that a practice felt to be morally reprehensible can be justified on utilitarian grounds. It is difficult for those who feel contraceptive practice to be wicked *not* to think that it must be physically harmful as well.

Dr. Walshe bids his Catholic Medical colleagues to beware of this elementary human weakness, and criticises Dr. McCann on the grounds of having yielded to it. "When," writes Dr. Walshe, "the harrassed wife he—*i.e.*, Dr. McCann—so graphically describes consults him, admits to contraception and confesses her dread of pregnancy, and the uterine condition outlined above is found, then, by some wholly arbitrary intellectual process he rules out the thousand and one other causes of the lesion and chooses contraception as the one significant factor. Thus, in a manner which is as old as human speculation, the facts of observation are ruthlessly stretched upon the Procrastean bed of a preconceived opinion."

To this criticism, coming as from one Catholic doctor of another, a greater weight must be given than could be credited to any observations of the reviewer.

A Manual of Surgical Anatomy. By LEWIS BUSHY, F.R.C.S.Edin., and T. B. JOHNSTON, M.B., Ch.B. 3rd Edition. Published by the Oxford University Press (Milford). *Price* 18*s.*

THIS manual has had great success, and has now reached a well-merited third edition. The text of the book has undergone a general revision, but the original plan remains unaltered.

The anatomy described is useful anatomy, and it is made interesting by the introduction of just the right amount of surgery and, where necessary, embryology.

New terminology has been used, but this does not, as is often the case, make reading difficult for one used to the old terminology, as where the two differ both names are given in print of equal size.

The illustrations, some of which have been redrawn, are extremely clear and the whole book is eminently readable and is one which every student should find useful—especially for that despairing attack on anatomy so often made a week or so before the Conjoint Finals.

Sport.

Rugby.

Guy's v. Coventry.

BY playing at Coventry, the Hospital XV opened their season against a much stronger side than usual, and after a keenly contested and interesting game, had to admit defeat by three placed goals and a penalty goal to a placed goal. W. H. Myburgh and B. G. Scholefield were unable to play.

Guy's surprised the home team by scoring in the first two minutes. The ball was heeled out smartly from a loose scrum and passed to Ryan. After a delightful cut through, Ryan gave to Clarke, who in turn passed inside for Preen to go over the line wide out. V. G. Boyle converted with a beautiful kick from the touch line and this was undoubtedly the best goal of the match.

Guy's, with their backs handling accurately, were the attacking force until near the interval when the persistency of the home forwards in their rapid rushes and strong pushing in the scrums near the line overpowered our defence. Our line was crossed by Jenkins, the try being converted by S. Blake.

There were some well-fought scrums in which Coventry were the masters, but by keeping a close watch on his vis-a-vis, Garland prevented the home scrum half from getting the ball away.

During the second half the Coventry forwards dominated the game and only some brilliant work by our backs kept them out.

Further tries were scored for Coventry by Blake and Wheatley the extra points being added by Blake. Towards the end the same player scored a penalty goal and concluded a useful afternoon's work by converting everything entrusted to him.

It is early yet to be critical, but judging from the second half, the team suffered badly from lack of training. There was plenty of spirit and enthusiasm in the first half, and it looked as though we would at least make a close game of it, but it failed to last.

Garland and Preen were a clever pair of halves; F. H. B. Spence, D. F. Ryan and V. G. Boyle rendered yeoman service in defence; whilst J. R. F. Popplewell (this year's captain), G. G. Cameron and T. Morgan were the pick of the forwards.

We are fortunate in that we have the whole of the members of last year's team available with the exception of Wilkinson and Schabort. However, judging by his form on Saturday, D. F. Ryan, a freshman from Cambridge and a Welsh trial, looks as though he will fill Wilkinson's place at centre. We are pleased to welcome back B. G. Schofield, who has returned after two years in America.

Guy's Team.—V. G. Boyle; A. J. D. Lewis, F. H. B. Spence, D. F. Ryan, G. J. Clarke; T. O. Garland, V. R. Preen; J. R. F. Popplewell, G. G. Cameron, J. H. Richmond, L. Brown, C. D. Malone, T. Morgan, A. R. Clarke, A. Simpson-Smith.

From the Coventry Point of View.

COVENTRY and Guy's Hospital are very old friends and rivals, and no more popular side ever visits the Coundon Road Ground than the Hospital Fifteen. There were fully 5,000 spectators to greet Coventry's visitors of September 17th, and the game they saw sent them away happy. It was a clean, hard, rousing contest, and although Coventry won by four goals 1 penalty, 18 points, to a goal, 5 points, they left the field with a profound respect for the Hospital defence. Coventry crowds are used to seeing teams crack up under such pressure as that to which Guy's were subjected throughout the second half. The Hospital defence stood up to its gruelling in gallant style and the home backs simply could not get away with the dummy that was oft offered but seldom accepted. From the Coventry point of view it was fortunate that the Coventry forwards got the upper hand and were able to control the game. If the Hospital backs had seen more of the ball, the game would probably have had a different complexion. As it was, the visitors gave Coventry a shock by scoring within two minutes of the kick-off. Lole, the home fly-half, passed wildly in the middle of the field. Ryan did not let the chance go begging, and intercepting, made straight for the line. He met Pitcher, the Coventry full-back, en route, and did not get any further, but Preen was at hand to complete a spectacular break-away in the approved fashion. Boyle's conversion from the touch line was a real gem of a kick.

Guy's nearly got through again via the medium of the right wing a minute or so afterwards. That danger averted, Coventry took up the offensive, and from then to the end of the game Pitcher could have worn a wrist-watch without fear of breaking it. Thrice the Coventry crowd cheered for tries and thrice they were disappointed when Referee Dodridge decided otherwise. Five minutes before the

interval, however, Jenkins, the Welsh International forward, scored for Coventry, Blake converting. At half-time the scores were level.

Coventry, now that H. J. Pemberton has retired to the touch-line where he waves the flag with great efficiency, are anxious about their three-quarter line, but on Saturday's showing it would seem they have little to fear, so well did the young nowcomers play. Harriman, Blake and Lole combined in a pretty inter-passing movement to enable Wheatley to get over again, Blake adding the points. Blake kicked a penalty goal when Guy's were penalised for making a bed of the ball and lying on it, and later ran in himself for a try which he converted with a similar kick to that of Boyle's. Thus all the place-kicks of the match were turned to profit. The impression left on one's mind was that the Hospital will win many more games than they will lose, proper attention being paid to bringing the forwards up to scratch.

Coventry Team.—G. Pitcher; S. J. Harley, S. Blake, G. Harriman, H. Lee; O. Hicks, W. E. Lole; N. Pugh, T. Coulson, F. Ford, L. Jenkins, H. Wheatley, H. Holbrook, R. V. Howell, A. Wyman.

Swimming Club.

ON Saturday, September 10th, the Hospital appeared at the K.E.B. Swimming Club Gala to give an exhibition polo match against the Hampstead Priory Swimming Club. A Club's popularity and renown may always be gauged by the number of invitations it receives to play at these galas. Perhaps the polo we play is not of international standard, but these invitations show us that we play good polo, and that the Hospital's name in this sport, as in others, assures the gallery of a hard, clean game that is worth watching. As the years go by we find it more and more difficult to accept all these kind invitations, for it seems that the older this Club grows the more followers and friends it makes, and in accepting these fixtures care has to be taken not to draw any invidious differences between the various clubs. We are always glad to help other clubs so far as we are able, but we cannot always avoid the clash of other fixtures, and so we have obeyed the maxim, "first come, first served."

We defeated the Priory 8—2, and the outstanding player proved to be E. M. Harding, who played in goal for us. It was his first appearance in that position, and he played extremely well in a hard game. The Hospital's "spoiling" was not so good as usual, but the side's shooting showed great improvement. L. Brown scored three times with long shots, C. D. Malone twice, J. W. H. Jones twice, and O. M. H. Jones once. On the whole, the Hospital side was faster, quicker with the ball, and more given to team work, its better combination never leaving the result in doubt.

Guy's Team.—E. M. Harding, C. E. M. de Grouchy, T. L. Kark, L. Brown, C. D. Malone, J. W. H. Jones, O. M. H. Jones.

Golf.

ON Wednesday, September 14th, we played a return match with the Sidcup Golf Club over the West Kent course.

The start of play was somewhat delayed, as our visitors had great difficulty in making up their minds to venture forth into a steady downpour of rain. Umbrellas of all colours were to be seen, and our visitors resorted to various odd types of dress in their efforts to defy the rain. We, however, were contented with the more usual form of attire—"Plus Fours."

Owing to the rapid onset of night we were not all able to complete the round, but we extend our congratulations to Birt, who refused to be beaten either by the elements or by his partner.

Although not registering a win we were able to put up a closer fight than in our previous engagement.

Results

Guy's		*Sidcup*	
L. W. Cann	0	A. J. Hughson	1
W. J. Cotton, 3 up	1	W. P. Taylor	0
E. J. Pye-Smith	0	G. May Creasey (4&2)	1
J. H. Anderson	0	F. S. Thompson	1
P. H. Lomax (3 & 2)	1	E' H. Membrey	0
J. A. Vernon	0	A. P. Street (3 & 2)	1
E. C. Duffett (5 & 3)	1	T. Sperring	0
S. H. Croot, 1 up	1	J. M. Crabb	0
H. B. Birt	½	H. S. Allen	½
L. B. Langmead	0	K. B. Bristow (4&3)	1
	4½		5½

Competitions

August 3rd, Medal—Winner, L. B. Langmead, 97—12=85.

September 7th, Bogey—Winner, P. H. Lomax (9), all square.

E. C. DUFFETT,
Hon. Secretary.

EDS. { G. M. H.
E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *October 8th, 1927.* *Number 1023*

PASSIM

UNTIL recently we have always avoided statistical literature, finding it somewhat heavy and indigestible in the reading. Statistics as a branch of science has fallen largely into the hands of the mathematician, who is always prone to produce work in the nature of technical exercise rather than a creative contribution. Material is manipulated in a clever fashion, but rarely built into a new form that provides a basis for further progress, and there is usually more concern for the correlation coefficient than the construction of a sentence. Fortunately, there are signs of a suppression of undue obscurity in form and shorn of the jargon of the higher calculus recent statistical work becomes not only readable but interesting.

A little thought shows us how deeply statistics enter into the science of medicine. The main difference between the clinician of experience and the man who has just qualified is that the former is able to give an accurate prognosis, based on personal experience, statistical in nature, of a wide range of similar cases. In a yet wider sphere the nation becomes the patient and the Registrar-General or Chief Medical Officer of Health the sapient clinicians whose experience is to guide national policy in matters of health and disease. During the past few months these distinguished gentlemen have been conducting general stock-taking of the national health. We are much indebted to the Superintendent of the Hospital for the convenient extraction of one of the more important of these reports, published in the following pages.

Scientific treatment of any subject involves the arrangement of facts in definitely related order, followed by the deduction of guiding principles based on the grouped material. The guiding principles emerging from the statistical investigation of the "hatch, match and dispatch" column are embodied in a movement on foot during the present week. A national organisation has in operation a press campaign designed to call the attention of the lay public not only to the victories over tuberculosis, to the boon of smoke abatement—hospital power engineers, hide your heads!—to the need of sunlight, artificial or otherwise, but also to the ever-increasing, and as yet uncontrolled, danger in rheumatism and malignant disease. We cannot but calm our biological conscience repress a hasty assertion that eradication of all diseases remains an ideal the attainment of which will produce chaos as unforeseen as that which follows the eradication of a species where a natural balance already exists, and wish them success in their somewhat optimistic efforts.

▭

ON Thursday, October 6th, the new academic year was opened by an address given by Mr. M. F. Hopson, who, until his retirement in the spring of this year, held the position of Senior Dental Surgeon to the Hospital. Mr. Hopson took as the subject for his address the title "Then and Now," in which he gave a graphic comparison between the conditions which existed in the Hospital when he qualified in 1891 and those which exist some 37 years later. In this time the Dental School has grown up to be one of the finest in the country. We hope in our next issue to publish a more detailed account of the proceedings.

▭

ON Tuesday, October 4th, a short Memorial Service, to the late Professor Adrian Stokes, was held in the Hospital Chapel.

The following have been appointed Clinical Assistants for the period October, 1927–January, 1928: Messrs. S. I. Abrahams, W. J. McConnell, W. F. Hudson, O. Plowright, J. R. Rickett and E. C. Till.

The following Senior Science Scholarships have been awarded as a result of the September examination:—

War Memorial Scholarship, £100—R. A. Ratcliff, King's College, Cambridge.

Open Scholarship, £80—R. S. Harrison, Magdalen College, Oxford

We regret that on page 383 of our issue of September 10th we incorrectly gave the author of a *Case Sheet for Artificial Light Treatment* as Dr. Katherine "Grainer." This should have read Dr. Katherine Gamgee.

We draw the attention of our readers to a letter from Mr. P. H. Gray, the Town Clerk of the Borough of Southwark, concerning a dinner which is to be given to His Worship the Mayor of Southwark, in recognition of the services he has rendered to the Borough as Mayor during the past municipal year.

We would remind our readers that the Guy's Hospital Biennial Dinner is to be held in less than four weeks time. Those who have not already done so, and who intend to be present, should notify the Honorary Secretary at once. We publish on page 436 a latter giving full particulars of the dinner, together with the names of those who have already signified their intention of being present.

On page 435 we publish a letter of appeal for funds for the General Lying-In Hospital, Lambeth. This Hospital, which was founded as long ago as 1765, is one of the oldest of its kind in London.

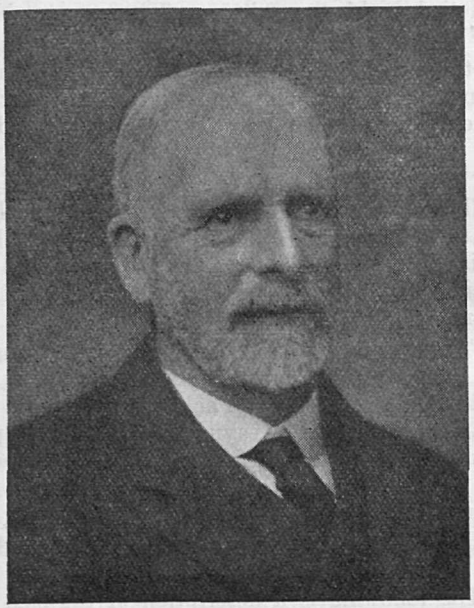
We publish on page 434 a revised Time Table for the attendance of patients in the Out-Patient Department. From last Monday, October 3rd, Medical Out-Patients will be seen in the *afternoon* instead of during the morning. We would especially draw the attention of our readers to this alteration and urge their careful consideration of the revised Time Table, so that both they, and the patients under their care, may be saved unnecessary inconvenience.

Obituary.

Dr. Tyson.

It is with deep regret that we record the death of Dr. Tyson, for though he had reached the age of 76, he retained up to the onset of the illness in June last his wonted energy and his interest in private and public affairs. Folkestone has lost its most prominent physician, the Royal Victoria Hospital its Chairman, and numberless people an old and tried friend. While many recent men at Guy's will recall Dr. Tyson's address at the opening meeting of the Physical Society a few years ago, there remain but few who were his contemporaries. He entered Guy's in October, 1870, when just over 19, and at once took a leading place amongst the men of his time. The entry being the largest on record—120 for the full curriculum—competition for the house appointments was particularly keen. After holding the chief of these appointments, he took the Fellowship of the Royal College of Surgeons in 1876. He immediately began practice in Folkestone, his native town, where his father had long been established, but not in partnership. Tyson had already marked out for himself a course which, directed away from the exacting routine of general practice, would lead to a consulting position. He realised that if he took all that came in his way the demands upon his time and energy would interfere with his aim of acquiring a wider knowledge of his profession, and fitting himself for a leading position. That this was no selfish motive was shown by his attention to the poor in the hospital and in their homes. To foster the end he had in view Tyson read widely, not only in medical literature but in other subjects. He was for some years secretary and the moving spirit of the local branch of the British Medical Association, and a familiar figure at the annual meeting. He became a member of the Clinical Society of London, served on the Council, contributed several papers and participated in the discussions. In order to obtain first-hand knowledge of the Continental water places it was his custom to visit one or more of these each year,

thus making the acquaintance of the medical men practising at these spas. He devoted much time to the Hospital, where, in addition to the duties of Physician, he took charge for some years of the Ophthalmic Department. He was not long in practice without recognising the importance of a University Degree, especially in consulting practice. To meet this requirement Dr. Tyson took the Degree at the University of Durham. This involved many journeys to Newcastle-on-Tyne, for it was necessary to pass all the examinations. The M.B. was obtained in 1879, three years after he b gan practice, the M.D. following in 1881. To the Royal Victoria Hospital



Dr. Tyson gave over 50 years of devoted service, and when rebuilding became necessary the question of the site gave rise to a sharp controversy. It was largely owing to his advocacy that the site on what was then the outskirts of the town was adopted. When the plans of the new hospital were being prepared Dr. Tyson visited Berlin to collect information on some of the latest developments in hospital construction said to exist in that city. Several of the suggestions, the outcome of this inquiry, were incorporated in the building. As chairman of the hospital he guided its fortunes for many years and, after his retirement from the physiancy, he continued in the position up to the time of his death at the express wish of the committee. His last appearance as chairman was to recieve Prince Henry at the opening of the new wing in July last. While some may have noticed the change in his appearance, few suspected—of what he himself well knew—the mortal character of his illness, for no slackening of interest, no loss of alertness, no failure to say the right word was apparent. It was to be his last appearance in public and, it may well be said, he died in harness. After he resigned from the active staff his advice continued to be sought by his colleagues, and was always given with frankness and courtesy. The fullness of his knowledge, his well-garnered experience, his breadth of view and the single-mindedness of his aim, commanded and retained to the end the respect and attachment of his medical colleagues. His contributions to medical literature, though never of great length, were full of sound experience. *Notes and Thoughts on Practice* was published in 1909; that on *Clinical Types in Pneumonia* and two recent papers in the *Lancet*, the one on "Acute Suffocative Œdema of the Lung," the other on "Post-Operative Mania," contain observations of much value. His last contribution, *Medical Notes*, dedicated to "My Colleagues at the Royal Victoria Hospital," was published in 1926 (H. K. Lewis & Co.). To local social efforts he contributed papers and addresses and, on several occasions, addressed congregations on Hospital Sunday. He was a prominent citizen in his native town, participating in all important undertakings, one of his chief aims being to maintain its special attractions. Had he desired municipal honours, the highest civic office would have been at his command. Dr. Tyson was a sound and devoted Churchman, and was a prominent member of the House of Laity for the Diocese of Canterbury. He enjoyed the friendship of the Archbishop, who frequently availed himself of the advice of a layman who took a deep interest in Church matters, and in the general welfare, material and spiritual of the people. In 1901 the Royal College of Physicians elected him to the Fellowship, an exceptional honour for a general practitioner. It was richly deserved as a recognition of his efforts in upholding on all occasions the dignity of his profession and in promoting the attainment of knowledge. Dr. Tyson was an original member of the Association of Physicians of Great Britain and Ireland, from whose meetings he was rarely absent. He was a Justice of the Peace (for Kent) and Chairman of the Bench for the Elham Division. Earnest to advance the welfare of his younger brethren, the sincerity and downright honesty of his motives could never be in doubt. His was a long, useful and full life, happy in the exercise of his profession, and the affection of his family. He died on September 5th. The funeral service at Christ Church was attended by a large and representative assembly.

Tobias Smollett, M.D., 1721-1771.

I HAVE lately been reading Smollett's novels with the idea of finding out something about the conditions of medical practice in his day.

Smollett himself desired a military career, but, contrary to his wishes, was apprenticed when about sixteen years of age to Mr. John Gordon, an eminent surgeon. This appears to have been by the authority of his grandfather, as his father had died some years before.

His grandfather died in 1739 when Smollett was barely 19, and he found himself almost without resources and came to London to try his luck, not as a doctor but as an author. As he was unable to make a living by his pen he obtained an appointment in the Navy as Surgeon's Mate, and took part in Admiral Vernon's Expedition to the West Indies and South America.

He gives a lurid account of the state of affairs in the Naval Medical Service in *Roderick Random*, which is obviously partly autobiographical.

In 1746 he had left the Service and was back in London, and must have studied his profession, as he was admitted to the M.D. in 1750. He was not a success as a medical man, however, and devoted himself more and more to literature.

Roderick Random appeared in 1748 and was a great success.

Peregrine Pickle appeared in 1751, *Count Fathom* in 1753 and *Humphrey Clinker* in 1771. It is from these novels that the following extracts have been made.

Smollett's literary output was very large, including dramas, poetry, reviews and a history of England.

Smollett's novels are rather strong meat for babes, being in parts frankly Rabelasian. At the same time they are not decadent or immoral, like so much modern literature, and undoubtedly faithfully portrayed the manners and customs of his times.

Roderick Random's examination at Surgeon's Hall :—

"A plump gentleman who sat opposite to me with a skull before him . . . examined me touching the operations of the trepan and was very well satisfied with my answers.

"The next person who questioned me was a wag, who began by asking me if I had ever seen an amputation performed, and I, replying in the affirmative, he shook his head and said : 'What on a dead subject, I suppose ? If,' continued he, 'during an engagement at sea a man should be brought to you with his head shot off, how would you behave ? '

"After some hesitation I owned such a case had never come under my observation, neither did I remember to have seen any method of cure proposed for such an accident in any of the systems of surgery I had perused. . . .

"The facetious member, encouraged by the success of his last joke, went on thus :

"'Suppose you were called to a patient of a plethoric habit, who had been bruised by a fall, what would you do ? ' I answered, 'I would bleed him immediately.' 'What,' said he, 'before you had tied up his arm ? '

"But this stroke of wit not answering his expectation he desired me to advance to the gentleman who sat next him and who, with a pert air, asked what method I would follow in wounds of the intestines.

"I repeated the method of cure as it is prescribed by the best chirurgical writers, which he heard to an end and then said, with a supercilious smile : 'So you think with such treatment the patient might recover ? ' I told him I saw nothing to make me think otherwise.

"'That may be,' returned he, 'I won't answer for your foresight, but did you ever know a case of this kind succeed ? ' I acknowledged I did not. . . . He stopped me by saying, with some precipitation : 'Nor never will. I affirm that all wounds of the intestines whether great or small are mortal.' "

Roderick's name was on the pass list and his fee was 5*s*. !

The following is a description of the sick bay on *H.M.S. Thunder* :

"At 7 o'clock in the evening Morgan visited the sick, and having ordered what was proper for each I assisted Thompson in making up the prescriptions, but when I followed him with the medicines into the sick berth or hospital and observed the situation of the patients, I was much less surprised that people should die on board than that any such person should recover. Here I saw about 50 miserable distempered wretches suspended in rows, so huddled one to another that not more than 14 inches space was allotted for each, with his bed and bedding, and deprived of the light of the day, as well as of fresh air, breathing nothing but a noisome atmosphere of the morbid steams exhaling from their excrements and diseased bodies, devoured with vermin hatched in the filth that surrounded them, and destitute of every convenience necessary for people in their helpless condition."

Here follows a realistic description of Roderick's efforts to administer enemata to the patients in their hammocks.

Captain Oakum, having received sailing orders, comes on board, hears there are 60 sick people on board and reduces their number in a very drastic manner to a dozen by ordering them on duty, when most of them die.

The *Thunder* later on takes part in the bombardment of Carthagena:

"The sick and wounded were squeezed into certain vessels, which then obtained the name of hospital ships, though methinks they scarce deserved such a creditable title . . . the space between decks was so confined that the miserable patients had not room to sit upright in their beds. Their wounds and stumps being neglected, contracted filth and putrefaction and millions of maggots were hatched among the corruption of their sores."

The wet season now came on and an epidemic of bilious fever started of such violence that three-fourths of those affected died, "the colour of their skin being, by the extreme putrefaction of the juices, changed into that of soot."

There are not many medical references in *Peregrine Pickle*.

This immortal work is very coarse in parts and gives a humorous account of the difficulties of satisfying the longings of pregnancy.

There are some very severe strictures on the Bath physicians and, I fancy, Smollett must have been disappointed in his attempts to practise there—in fact, on the whole, he does not portray the medical profession in a favourable light.

The following extract is from *Count Fathom*, chapter VI:

"He was blooded, vomited, purged and blistered in the usual forms and swallowed a whole dispensary of boluses, draughts and apozems, by which means he became fairly delirious in those days, and so untractable that he could not be managed according to rule, otherwise, in all likelihood, the world would never have enjoyed the benefit of these adventures."

The following extracts are from his last work, *Humphrey Clinker*, published just before his death:

"I took some of the Tincture of Genseng, prepared according to your prescription, and found it exceedingly grateful to the stomach"—p. 189.

"By your advice I sent to London a few days ago for half a pound of gingzing, though I much doubt whether that which comes from America is equally efficacious with what is brought from the East Indies"—p. 52.

"I am glad to find the inoculation has succeeded so well with poor Joyce and that her face will be but little marked"—p. 53.

"You won't deny that many diseases are infectious. Even the Consumption itself is highly infectious. When a patient dies from it in Italy the bed and bedding are destroyed and the other furniture is exposed to the weather and the apartment whitewashed before it is occupied by another live soul"—p. 64.

This last extract should interest Guy's men:

"I think Guy, who was himself a bookseller, ought to have appropriated one wing or ward of his hospital to the use of decayed authors, though, indeed, there is neither hospital, college or workhouse within the bills of mortality large enough to contain the poor of this society, composed, as it is, from the refuse of every other profession"—p. 163.

These were among the last words written by Smollett and a bitter comment on the results of 30 years of literary toil.

I wonder if he realised he was among the literary immortals?

S. G. F.

Speciality.

E. & S. LIVINGSTONE, Publishers, Edinburgh.

THIS house, founded in 1864, originally confined its attention to bookselling, but quite early in its career entered the publishing field. From that time up to the present day it has continued to publish medical text-books of sound value and well-deserved popularity. At present it is responsible for such well-known books as Wheeler and Jack's *Handbook of Medicine*, Muir's *Bacteriological Atlas*, Ross's *Handbook of Anæsthetics*, and the well-known *Catechism* series, now running into 58 parts. This firm offer to forward a complete catalogue of their publications post free to any address on application being made to their office at 16 and 17, Teviot Place, Edinburgh.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.

Extracts from the Registrar-General's Statistical Review for 1925.*

THE following extracts from the Registrar-General's *Statistical Review* may be of interest to the readers of the GAZETTE in view of the unparallelled field of observation open to the Registrar-General as to the causes of death, their local and seasonal variations, and their secular fluctuations.

A few textual alterations have been made by way of deleting references to statistical tables not here printed, but otherwise the extracts are taken verbatim from the Registrar-General's *Review*.

H.L.E.

INFANT MORTALITY

Of the 472,841 deaths registered during the year, 53,316, or 11.3 per cent., were those of infants under 1 year of age. This proportion has fallen greatly of late years, owing largely to reduction of the birthrate. So recently as 1901–10 it was 22.6 per cent.

The rate of infant mortality resulting from these deaths is 75 per 1,000 births. Like the death-rate at all ages, this is the lowest recorded in this country except in 1923, when it fell to 69.

The rates for the county boroughs and for the North are, as usual, in considerable excess, the highest rate for infants of both sexes being 96 for the Northern county boroughs and the lowest 51 for the rural districts of the South. In each year from 1911 onwards the rate for the Northern county boroughs has been the highest, and in each year except 1923 that for the rural districts of the South has been the lowest. For each sex in each class of area mortality in 1925 decreased regularly from the North to the South of England.

The decrease of mortality from North to South is observable from the very first day of life. At each age in each class of area distinguished mortality is highest in the North, while the table reveals but three cases—urban districts at ages under 1 day and 5–6 months and rural districts at 2–3 weeks—in which the rate for the South is not lowest. For the county boroughs there is no exception to the rule of decrease or mortality from North to South. As in each of the eight preceding years with which comparison can be made, the mortality of the first day was highest in the rural districts of the North.

As is usually the case, more deaths of illegitimate infants occurred on the first day than during the remainder of the first week, whereas with the legitimate this ratio is reversed. London, as usual, returns a particularly low neo-natal mortality, its rates for the first four weeks of life as a whole being the lowest. This was shown in the *Review* for 1923 to have been a feature of London infant mortality for many years.

Remarkable changes have occurred within the last 11 years in the cause to which infant mortality is attributed. The infectious diseases rate, chiefly due to whooping cough, varies considerably from year to year, but shows less decline than those for many other causes, though looking back to the beginning of the century the figures now prevailing are a little more than half those of 25 years ago. Measles, whooping cough and diphtheria all exhibit substantial declines. The fall recorded for tuberculosis is much greater—indeed, this disease is rapidly losing all importance as a contributor to the registered mortality of infancy. During the present century the rate has fallen from 6.41 deaths per 1,000 births in 1901 to 1.26 in 1925. The decline is great for each of the forms of this disease, but greatest of all for peritoneal and intestinal tubercle, mortality from which is now less than one-tenth of that recorded in the early years of the century, and is still falling rapidly. How far this change is a real one, dependent on such causes as improvement of the milk supply, and how far it is due to ascription in earlier years of deaths to abdominal tuberculosis on evidence which would not now be accepted, must remain largely an open question. But it may be noted that during the whole of the present century the mortality of infants returned for all the forms of tuberculosis distinguished in the table has been falling steadily. Another very striking fall is that for convulsions. During the 11 years 1915–1925, this mortality has been reduced by more than one-half, and it is now less than a quarter of that returned at the commencement of the century. Here, again, improvement in certification, attributing the death to the cause of the convulsions, is probably largely responsible for the change.

* *The Registrar-General's Statistical Review of England and Wales for the Year* 1925 (New Annual Series, No. 5, Text). London, Printed and Published by His Majesty's Stationery Office. To be purchased direct from H.M. Stationery Office at the following addresses: Adastral House, Kingsway, London, W.C.2; 120, George Street, Edinburgh; York Street, Manchester; St. Andrew's Crescent, Cardiff; 15, Donegall Square West, Belfast; or through any bookseller. 1927. Price 15*s.* net.

Mortality from respiratory disease, which now forms almost a quarter of that from all causes, shows an interesting change. In the first two years of the century the death rate ascribed to bronchitis exceeded that to pneumonia, but since then the bronchitis rate has been reduced by more than one-half, while that from pneumonia has remained fairly constant, so that it is now more than double the bronchitis rate. In all probability this change is mainly one of nomenclature, the attention of the medical profession having been called a few years ago to the fact that the proportion of bronchitis to pneumonia in death certification for young children was much in excess of that met with in the pathological departments of hospitals. As the distinction between these diseases in the records of infant mortality must be regarded as of doubtful validity, they have for many purposes been combined. Infant mortality from " other respiratory diseases " has fallen of late years even faster than that from bronchitis, the 1925 rate of 0.33 comparing with that of 0.75 in 1911. Here the greatest fall has been in diseases of the larynx, but " pulmonary congestion," etc., also shows a large fall, which is probably due to change in nomenclature in favour of pneumonia.

In contrast, however, with these evidences of increasing care of the infant after birth the continued increase of mortality from injury at birth must occasion some concern. This has steadily grown from 0.65 in 1901, the lowest of the century, to 1.49 in 1925, the highest rate. The fact that this mortality has more than doubled during the past 25 years suggests an increasing tendency to interfere, at the infant's expense, with the natural processes of child-birth ; and some support may perhaps be lent to this view by certain hitherto unpublished figures relating to the social incidence of infant mortality in 1921. It was found that when for that year these returns were graded into five social strata in accordance with the occupation of the father, the mortality from birth injury was 1.8 in the first social class, 1.6 in the second, 1.3 in the third, 1.4 in the fourth and 1.1 in the fifth. It is, of course, conceivable that more skilled attendance upon class 1 confinements leads to the recognition of many deaths as due to birth injury (cerebral laceration, etc.), which in other circumstances are referred to other causes, but whether explanation on these lines can account for so great an apparent excess of risk for the upper and middle class infant is a matter which must be left for the consideration of obstetricians.

CAUSES OF DEATH GENERALLY

Enteric Fever—

The deaths classified to this heading during 1925 numbered 388. Of these 41, or 11 per cent., were returned as paratyphoid as against only 6, or 0.25 per cent., in 1911, the first year for which the information is available. The mortality corresponding to these deaths, 10 per million living, is the lowest recorded in this country.

Smallpox—

The number of deaths allocated to this cause in 1925 was 9, yielding a death rate of 0 (less than 0.5) per million living. Smallpox mortality has now been of this insignificant order in each year since 1905.

These 9 deaths include all on the certificates of which any mention is made of smallpox, even when, as sometimes occurs, the certificate is so worded as to suggest mild smallpox, was not regarded as at all a decisive factor in causing the death. For this reason the number so allocated in this *Review* exceeds that of 6 accepted by the Chief Medical Officer of the Ministry of Health in his *Annual Report* as deaths due to smallpox. Particulars of the three rejected by him may be found in his report.

The number of cases notified was 5,365, yielding an incidence rate of .14 per 1,000. This is much the highest rate experienced since the commencement of this record in 1911, and its relation to the death rate of course demonstrates the extraordinary mild type of smallpox infection prevalent during 1925.

Measles—

The death rate of 137 at all ages is lower than for any year prior to 1919, and than for any year except three in our records. A fairer comparison is provided by the rate for children under 15, for whom rates lower than the 520 per million in 1925 have been recorded in five earlier years, but in none before 1916.

The extent to which each sex and age group has contributed to the decline of 49.6 per cent. shown for mortality at ages 0–15 from 891 per million in 1911–20 to 449 in 1921–25 is as follows, the later mortality being stated as a proportion per 1,000 of that recorded for 1911–21 in last year's *Review* :—

		MALES			
0–1	1–2	2–3	3–4	4–5	5–10
554	503	464	418	438	432
		FEMALES			
0–1	1–2	2–3	3–4	4–5	5–10
523	496	449	434	375	431

The enormous reduction which has occurred is thus widely distributed over both sexes and all ages chiefly concerned.

The rule of decline for measles mortality from the North to the South of England for each class of area compared, and from county boroughs to rural districts is each section of the country, is seen to be without exception in 1925, and in

previous years from 1911 onwards, exceptions to it have been few and unimportant.

Scarlet Fever—

The mortality in 1925 of 86 per million living at ages under 15 years is lower than in any previous year except four—1917, 1918, 1923 and 1924. It is less than half that recorded for any year prior to 1911, less than one-third of that for any prior to 1908, and less than a quarter of that for any prior to 1898, when the rate of 320 looked very low in comparsion with previous experience, notably in 1861–70, with its average mortality of 2,617, over 30 times that for 1925.

Since 1917, however, when the low record of 62 was reached, the decline of this rate, which had for many years previously been extremely rapid, has been arrested. But for 10 years in succession it has remained much lower than in any single year prior to 1916. The fatality of notified cases remains low —11 per 1,000—as compared with that of most years since the commencement of the record in 1911, a remarkable change in this respect having occurred between 1918 (20.0) and 1921 (9.5).

The mortality of each type of area compared decreased from the North to the South of England in accordance with the general experience of recent years, but in the South mortality was, as in 1924, higher in the rural districts than in the small towns, though in the North and Midlands it increased regularly with urbanisation. While the rate for the rural districts of the South remains the lowest but one in the table, these areas have not shared in the general reduction since the commencement of this record in 1911.

The high mortality of the Northern county boroughs was mainly due to high fatality. The prevalence in London was almost as high, but fatality there was only half that of the Northern boroughs. For each class of area both prevalence and fatality were highest in the North, and, except for the rural districts, fatality in all cases decreased from the North to the South of England. It was higher, however, in the rural districts of the South than of the Midlands, and much higher in the rural districts than in the small towns of the South. It is to an increase of fatality, shared by no other section of the country, that the absence of reduction in the mortality of the Southern rural districts is mainly due, just as the reduction in mortality on mortality for the country generally since 1911 is mainly due to decrease of fatality. Thus, scarlet fever resembles smallpox and influenza in that mortality is influenced more by fatality than by prevalence.

Whooping Cough—

Mortality was considerably higher in 1925 than in 1924, the rate per million living at ages 0–15 increasing from 384 to 394. But even the latter rate is much lower than any recorded during the nineteenth century, and is also lower than for 17 out of the last 25 years.

Extra-Metropolitan mortality has increased regularly with urbanisation, as it did also in 12 out of the 14 preceding years. For each class of area also, considered separately, decrease in mortality is, as usual, regular from North to South.

Encephalitis Lethargica—

The mortality of 35 per million from this cause was almost the same of that for the previous year, 36, the highest previous rate since the introduction of the disease in 1918 having been 19 in 1921. The age distribution of the deaths remained much as described in last year's *Review* for that and the three preceding years—widely scattered over the whole of life except old age, which escaped lightly, while young children and elderly adults suffered most.

The mortality appears to have been fairly uniform on the whole throughout the country, but is returned as lower in London and in Wales than elsewhere. The report of the Chief Medical Officer of the Ministry of Health refers to the frequency with which other diseases, such as tuberculous meningitis, are probably mistaken for encephalitis lethargica, so it cannot be assumed that the experience of London and Wales has in reality been as relatively favourable as is suggested by the tables.

Tuberculosis—

The deaths assigned to tuberculous affections in the aggregate number 40,387—22,234 of males and 18,153 of females.

The figure for males is the lowest recorded during the present century except that of 22,085 in 1923, and that for females is, without exception, considerably the lowest, 1923 coming next with 18,703 deaths. Mortality is still falling for each sex, and is now much below the lowest rate recorded before the war, those for the years 1912–14. The reduction in 1925 applies chiefly to females, whose rates have fallen at each age distinguished except 15–20, while for males there has been some increase both at this age and at 45–65. But for each sex mortality was distinctly lower in 1925 than in any previous year.

There is little difference so far as total mortality is concerned between the North and South of England, but that of the great towns, which is in excess in all parts of England, is more so in the North than elsewhere. Urban excess, associated no doubt with conditions of employment, is much greater for males than for females.

When age is distinguished striking differences between the North and the South emerge which do not apply to the total rates. The juvenile rates

are in heavy excess in the North, especially in the great towns, and those for advanced age in London. It is, of course, possible to conceive of such differences as due to varying types of certification. All available evidence goes to show that this is at its best in London, and it may be well that the difficult recognition of late phthisis is more frequently effected here. On the other hand, the difference for males aged 0–5 between London (77) and the Northern county boroughs (193 per cent.) is similar to that for the same age between the England and Wales of to-day and of 30 years ago, the recorded mortality having fallen much more meanwhile at this than at any other age. This early mortality varies greatly also with urbanisation, being nearly three times as great for males in the county boroughs as in the rural districts. But for each sex, and in all classes of area, it decreases enormously from North to South. At the intermediate periods of life, including those at which mortality is highest, its local variations are much less than in early childhood and old age. There is no great difference at these ages between North and South, but at all ages increase with urbanisation may be noted, especially for males.

Cancer—

The deaths ascribed to cancer during 1925 number 51,939—24,002 of males and 27,937 of females. For both sexes these numbers are the highest yet recorded.

Of these deaths, 40,832 were referred to carcinoma and 2,729 to sarcoma and 8,378 to " cancer " not otherwise defined.

A broad survey of the picture presented shows in the first place that as compared with other causes similarly dealt with, the respiratory diseases for instance, cancer mortality is on the whole strikingly constant all over the country. The standardised rate for persons of both sexes varies only from a maximum in London of 10 per cent. above the general average to a minimum in the rural districts of the South of 12 per cent. below it, the range of variation for males (118–84 per cent.) being much greater than that for females (106–89 per cent.). Moreover, the differences which do occur are all of such a nature as to suggest that they may rather depend upon differences in completeness of certification than upon differences in prevalence of the disease.

If this is, in fact, the case, the uniformity of distribution implied is remarkable, and is far from suggestive of the varying local action of an infective agent. If cancer is indeed due to such agency it would seem that, unlike other infections, it affects all parts of the country and all classes of area to substantially the same extent. It will be seen that, as often noted in previous years, mortality is shown as decreasing with urbanisation, from a maximum in London to a minimum in the rural districts. But this is surely only what might be expected from the relative facilities for diagnosis in the areas compared. The difference applies much more to males than to females, as is to be expected in view of the much greater accessibility of cancer in the female. It was shown in last year's *Review* that during 1911–20 the proportion for males of mortality (crude and standardised alike) ascribable to the sites classed as accessible was 29 per cent., while for females the corresponding proportion was 47 per cent.

Diabetes—

The deaths allocated to this cause number 4,357—1,814 of males and 2,543 of females, corresponding to death rates of 98 per million males and 125 per million females. Both this number of deaths and the death rate for males have been exceeded in a number of earlier years—most of all in 1914–16—but for females both deaths and death rate exceed those of any previous year.

The failure of this mortality to respond to the introduction in 1923 of a specific remedy which has undoubtedly saved many lives which must have been lost without it has naturally excited considerable interest, and it seems opportune, therefore, to examine the mortality records in some detail. This has indeed already been done in the Statistical Department of the National Institute for Medical Research,* but the matter is of so much importance that any fresh light which re-examination can throw upon it must be of interest.

The history of the crude mortality during the last 11 years shows that the rate for females, which before 1920 was constantly below that for males—as also for the whole of our recorded medical history prior to 1915—has been uniformly and increasingly in excess from 1920 onwards. Since the effective introduction of the new remedy early in 1923 the crude death rate for females has increased from 122 in 1922 to 125, while that for males has fallen from 116 to 98.

In order to ascertain how far this remarkable record represents the real trend of mortality, and how far it might be accounted for by changes taking place in the age constitution of the sex populations compared, standardised rates have been calculated for each year 1911–25 as follows :—

* Young & Russell, *Quarterly Journal of Medicine*, No. 77, October, 1926.

MALES

1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
108.8	113.8	115.5	120.4	123.5	120.6	99.6	92.5	95.8	86.8	92.4	101.0	89.7	85.9	81.4

FEMALES

1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
91.6	93.5	101.6	102.8	103.9	98.0	82.0	76.8	82.6	82.2	89.3	97.1	94.1	88.2	93.7

The substitution of standardised for crude rates has merely postponed the date of sex reversal from 1920 to 1923, the first year of insulin supply. In comparing the sex rates for the war years it should be remembered that those for civilian males, though not inflated, like the crude rates, by exclusion of young men, with their low diabetic mortality are artificially increased by selective recruitment of the healthy for military service, which largely reduced the population dealt without corresponding reduction of deaths. For males as well as females a very abrupt decline is nevertheless seen to have occurred in 1917, which was maintained until 1922, since when there has been continuous fall for males, and little net movement for females—the slight rise in their crude rates disappearing on standardisation. There can probably be little doubt that this war fall was due to food restriction, a similar effect having been experienced at the same time by various other combatant populations.

During this interval there has been little change in the small mortality of childhood, substantial decrease for males at all ages 15–75, with some increase at higher ages, and slight decrease for females at 25–55 only, with large and progressive increase at later ages. The movement is clearly very dissimilar for the two sexes, and we can see at what ages the relative increase for females has occurred, amounting for the recent reversal of the long observed order of sex mortality.

Turning now to detailed examination of Diagram 1 it will be seen in the first place that a very definite and progressive reduction of mortality since 1922 is recorded for both sexes, but chiefly for males, at all ages 15–55. (It has been possible to insert the date only for each alternate mortality column, those relating to odd number of years, but it is hoped that this, when understood, will not prove embarrassing to the reader, whose attention, it is suggested, should be directed primarily to the broad effects portrayed.) There can be little doubt that this fall is due to the use of insulin in the years 1923 onwards, and it will be seen that the effect has been much greater for males than for females. This contrast is specially evident at age 15–25, where the rate for males has been reduced by more than 50 per cent., but that for females is almost unaffected. At these ages (15–55) the reduction caused by food restriction from 1917 upwards, with subsequent increase until the insulin drop in 1923, can also be traced for each sex, but these features are more in evidence at the later ages. The movements in childhood are irregular, and indeed it might have been better to merge the very low mortality at 0–5 with that at 5–15. Both the war and the insulin reductions can be traced for each sex at 5–15, but at 0.5 the significance of the irregular changes charted is very doubtful.

At ages over 55 insulin seems to have had little effect upon the picture presented, which is dominated by the food restriction fall in mortality, starting as a rule in 1916 and culminating in 1918. After 1918 progressive increase of mortality sets in, which by 1925 amounts for females over 65 years of age of relatively high diabetic mortality, which has so effectively masked the effect of insulin on the total mortality at all ages. These features become more pronounced as age advances, and are much more definitely observable for females than for males.

The suggestion which obviously presents itself that this *post bellum* increase represents the reaction of the old, especially of the female sex, against resented food restriction during war time, must be left to the judgment of the reader. It is hard to bring an indictment against a generation. And it is quite conceivable that a similar reaction, in the form of over-eating when supplies of food once more became abundant, may have occurred at all ages, but that the danger of its causing hyperglycæmia is restricted to later life. Indeed, the "mild diabetes" of the elderly, specially amenable to dietetic treatment, has long been a commonplace of clinical medicine. Whether such deaths are correctly to be regarded as due to diabetes at all is perhaps in some degree open to question, as a tendency may be observed at present to limit the concept of "true" diabetes to cases of pancreatic origin. But this limitation does not apply to the international title No. 57, which is defined as including "glycosuria," nor does it apply to the accepted use of the term diabetes in the past in this country, which has included hyperglycæmia and glycosuria due to defective liver storage (the probable explanation of most of these elderly cases) or other cause as well as the more pernicious cases occurring earlier in life as the result of pancreatic disease. Moreover, continued hyperglycæmia is believed to be capable of setting up pancreatic diabetes in the elderly

by prolonged over-stimulation of the islands of Langerhans. How far the recent sudden increase of mortality in later life may be due to "true" diabetes so caused and how far to other consequences of hyperglycæmia resulting from overeating, or to attribution of the deaths of hyperglycæmic subjects from some independent cause to their hyperglycæmia, are matters which must be discussed in the light of other evidence than that of death certification.

The failure of the total diabetes death-rate to respond as might be expected to the introduction of insulin has been attributed, especially in America, to increased consumption of sugar since the war, presumably as part of a general reaction after diatetic restriction. In the United States consumption rose from 78 pounds per head in 1918 to 98 pounds in 1921,* and there can be little doubt that similar increase has occurred here also. But there appears to be no reason to believe that cane sugar is more harmful than other forms of carbohydrate consumed in excess, since the blood sugar is found to rise as quickly after a meal of starch as a meal of sugar. Dr. W. H. Davis, in the 1922 report referred to, makes two other suggestions as to the cause of the increase of mortality from diabetes in the year noted also in the United States which appear to have greater intrinsic probability—(1) increased attention directed to the disease by the dramatic discovery of a new specific remedy, and (2) overeating in general. Against (1) may be urged the restriction of the increase to old age, with simultaneous reduction of mortality at earlier ages, so general overeating seems to survive alone as a suggestion consistent with all the facts under discussion.

Anæsthetics—

No very striking changes from 1924 are recorded in the number of deaths under different kinds of anæsthetics, a subject dealt with at some length in last year's *Review*.

DEATHS UNDER OR ASSOCIATED WITH ANÆSTHESIA IN LATER PERIODS COMPARED WITH THOSE OF 1901–5, TAKEN AS 100

	MALES									FEMALES								
Year	All Ages	0	5	15	25	35	45	55	65	All Ages	0	5	15	25	35	45	55	65
Yearly Average 1901–5	110	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1906–10	132	186	100	133	123	113	145	129	200	145	117	156	129	164	138	125	233	150
1911–15	176	214	115	156	154	175	218	199	150	219	233	189	214	145	275	225	333	250
1916–20	198	257	125	278	208	138	182	271	325	225	183	178	200	191	275	213	233	450
1921–25	214	286	140	222	138	169	327	529	600	319	333	189	243	273	363	313	567	600
1921	215	214	145	178	123	119	309	429	750	251	267	256	229	218	263	238	367	150
1922	195	207	105	178	69	169	273	500	450	285	267	167	171	264	388	325	400	500
1923	276	321	185	322	131	238	318	486	675	347	367	256	200	209	400	400	767	750
1924	258	364	150	233	192	131	382	557	400	347	433	122	429	264	388	263	600	900
1925	262	307	125	189	177	175	355	643	725	364	367	156	214	391	400	363	767	750

The increase applies to both sexes and all ages, and has been, on the whole, steadily progressive throughout the 25 years covered by the table, though showing sudden spurts in 1920 and 1923—and again in 1926, when numbers have risen from 442 to 556. It has been greater for females than for males, and in early childhood and in later life than during the intervening years. But throughout, deaths of males have been in considerable excess at most ages, though least so between 15 and 45, at which period of life deaths of females have been in excess in 4 out of the past 5 years, though there was excess for males in each quinquennium 1901–5 to 1916–20.

For reasons discussed in last year's *Review* it seems probable that the increase of deaths so returned since 1901–05 of 199 per cent. (148 to 422) is not in the main a mere matter of change in recording practice, but that it probably implies a rapid growth in the number of deaths occurring under anæsthesia, whether this is due to increase in the number or in the fatality of (or associated with) administrations. As to the first of these two possibilities no official records are available, but a statement may be noted in a recent number of the *Lancet** that between 1911 and 1923 the number of operations—not administrations—in a large London general hospital increased by 13 per cent. This yields, after all, but a modest contribution towards the explanation of an increase during the same period of 62 per cent. in the number of deaths in England and Wales. It is from anæsthetics that an adequate explanation of the startling increases now so frequently reported

* *Mortality Statistics*, 1922, p. 51.

* January 22nd, 1927, p. 173.

must be sought, and no doubt the matter will receive their attention.

The high proportion of these deaths reported by institutions will be noted. Of the whole, 72 per cent. occurred in hospitals, 13 in Poor Law Institutions, 5 in Nursing Homes and only 10 per cent. elsewhere—*i.e.*, mainly in private houses. There can be little doubt that the practice of resorting to institutions for the purpose of operation is increasing rapidly, but many cases must continue to occur where anæsthetics are administered in the home as a matter of choice or necessity, and such a ratio as 10 per cent. is therefore bound to raise the question whether deaths are as fully reported from private as from institutional practice. Of 318 hospital deaths, 94, or 30 per cent., occurred in London, forming 21 per cent. of the total. These figures are certainly high, but they do not necessarily cast any reflection upon anæsthetic practice in the London hospitals, which, of course, serve a large population outside London, especially for purposes of operative surgery. According to the *Report* of the Voluntary Hospitals' Commission, 1925, there were in London in July, 1924, 13,757 hospital beds out of a total of 50,460 in England and Wales, or 27 per cent. of the whole. The proportion of London hospital deaths is thus only slightly in excess of the proportion of London beds. And another important consideration may be involved by the surgical policy pursued. It must be borne in mind that these are deaths not necessarily from, but under, anæsthetics, and if a bolder surgical policy is followed in London than on average elsewhere, its price must be paid by more deaths on the operation table. But it does not follow that even if this is so the London policy is too bold ; it may be that the provincial is too cautious. There are emergencies which can be adequately met only by taking very grave risks, and these are often experienced by the surgeon. If in a difficult case of cancer, for instance, the choice lies between palliative treatment involving the certainty of a lingering and painful death in the course of a few months or years and a radical operation offering an appreciable chance of permanent relief at the cost of grave risk of immediate but painless death, there is surely much to recommend the latter alternative, even though it necessarily increases the number of " deaths under anæsthetics."

It is, indeed, stated in the *Lancet* article quoted, that the operations occasioning the 123 deaths under ether in 1923 were only of normal gravity, but definite proof of this from the statements appearing on death certificates would be impossible. It would be useless on this evidence to attempt an appreciation of the relative gravity of operations with fatal results in London and elsewhere. The task could be attempted only by means of a central investigation and appraisement of the facts of each death.

For some reason the proportion of males is exceptionally high for the London hospital deaths. On the other hand, females, contrary to the general rule, are in considerable excess amongst those dying in private houses and nursing homes. This excess is probably to a large extent accounted for by obstetric practice, the number of such deaths being 38.

Sidelights from the Sudan—A Journey.

I RETURNED from leave to find that my original posting to Kordofan Province had been postponed and that I had been given charge of the Hospital Ship *Lady Baker* for three or four months. Thus, instead of writing this on a trek table amongst the gebels of the West I am writing from the lap of luxury, a privileged spot in the far South.

The *Lady Baker*, originally a Government post boat, was fitted up as a hospital ship for work on the Upper Nile some years ago. She is a stern wheeler burning wood fuel and fitted with fans and an electric lighting plant. There are three decks—a sun deck, on which are the navigating bridge and my own " nemlieh " or mosquito proofed sleeping-out place ; first deck with my saloon, bedroom, bathroom, stores and operating theatre, laboratory, and two wards, first and second class ; and the main deck, containing engines and quarters aft and dispensary, stores, kitchen and animal nemlieh forward. On this deck are carried the fowls who provide my morning eggs, a cow who kindly provides milk for my coffee, and my pony. My establishment consists of a native "captain"—reis—whose sole job is navigation, three A.M.O.'s, natives of the country, who are capable of giving injections and carrying out routine treatment, a number of " tamargies " or dressers, ship's crew, and my own cook and servants.

Here we are then in the cooling eventide of a sweltering day some seven hundred miles south of Khartoum. It is just 5 o'clock and the sun is rapidly sinking in the west ; soon one must retire to the mosquito-proofed deck-house for the air will be stiff with the little swine. We have been out now just over a month, and the time has

been spent in establishing treatment centres along the Nile bank, and here and there trekking inland by mule to gather in the sick of the wild nomad tribes, using the ship as a base hospital and establishing clearing stations as we go.

This is as fine lion and elephant country as you will find in the African Continent, and times have been exciting enough to make these inland treks very pleasant. Once—but no! Lion stories are almost as boring as fishing stories, and as little believed, so we will leave that sin at least uncommitted. In the elephant world we have been unfortunate—a brace of heavy tusks would just now go far to relieve the financial ague which is leave's corollary, but though we have tracked down at least two herds they have all been under weight, and as one is allowed only two a year, and is fined if the tusks weigh under 40 pounds, we are taking no risks.

The people belong to various tribes. The Shilluk, Anuek and Dinka are warlike sportsmen who do not bother themselves with clothes; in fact, so long as they have got a few spears apiece they are sartorially happy. When going on trek they mat their hair into long coils with grease and butter, which they subsequently use as a sort of iron ration. The fourth tribe of my present peoples, the Nuer, are not so pleasant; they are a treacherous crowd, and occasionally sling a spear at the odd Englishman by night, so that here abouts one sleeps with one eye open.

Compared with Khartoum which, of course, lies in the true "desert sands," beloved of novelists alone, this country is a paradise. Everything is delightfully and gloriously green, and teeming as it does with game it is a fascinating place in which to work. This evening, for instance, a herd of magnificent buffaloes has come down to water, and makes a splendid sight. Incidentally, someone says that buffaloes never charge unless wounded. Well, he is wrong, and I had no idea I could run so fast and climb a tree so quickly!

There is, of course, a "snag"; in fact, two "snags." Firstly, it is lonely; I have not spoken a word of English except to myself for over a week, and I do not suppose I shall see a white face for two or three days yet. Just at first it is rather trying, but one gets used to it, and almost persuades oneself into enjoying it for a time. Then it is very easy to go sick; one little bite or one little scratch and one may be flattened for several days. Still, it's not half so dangerous to one's health as trying to cross Piccadilly Circus these days, and the fact remains that however potentially sick one may be, one is fit at the moment.

J. S.

Guy's Hospital Branch of the L.I.F.C.U.

THE London Inter-Faculty Christian Union is run on definitely Evangelical and Bible lines. It has branches in practically every hospital and college in London.

About three years ago a small group of Guy's men started meeting together once a week, in a room in the College, for prayer and devotional Bible study. Some months later this little group decided to become affiliated to the L.I.F.C.U. as the Guy's Hospital Branch. Up to the present time the membership of this branch has been maintained and augmented mainly by personal invitation. It is realised, however, that there are some who are still unaware of the existence of such a Union, and to all such a cordial invitation is extended to participate in the activities of the L.I.F.C.U.

There is a 10-minute prayer meeting, at 9 a.m., every Monday, Wednesday and Friday, held in the gallery of the Chapel (by kind permission of the Chaplain). Also, this term, a new series of weekly lunch-hour Bible Readings will be commencing, at which it is proposed to study the lives of some of the great Bible characters; these talks will be of quite an informal nature and will be held every Wednesday, 12.10 to 12.40, in the Chaplain's room adjoining the Chapel. In addition to our local activities, United Meetings, Missionary Breakfasts, Week-end Conferences, and other fixtures are arranged in conjunction with the other Branches of the Union.

The Secretary would particularly like to get into touch with any Fresher who is connected with such movements as the Crusaders' Union, The 'Varsities' and Public Schools' Camps, the C.S.S.M., or the Christian Endeavour.

Anyone who is interested should communicate with the Secretary of the Guy's Branch of the L.I.F.C.U.,

ERNEST N. STEVENS,
Hon. Sec.

Time Table for attendance of Patients in the Out-Patient Department.

N.B.—NEW Patients should not be sent to those Departments marked with an asterisk.

	Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*	*Saturday*
Medical ..... **11.30 a.m.**	Dr. Mutch	Dr. Marshall	Dr. Campbell	Dr. Ryle	Dr. Conybeare	Dr. Campbell
Surgical **9 a.m.**	Mr. Slesinger	Mr. Davies-Colley	Mr. Ogilvie	Mr. Hughes	Mr. Bromley	Mr. Ogilvie
Children ..... **9 a.m.**	Dr. Cameron	—	Dr. Cameron	—	Dr. Cameron	—
Skins	—	Dr. Barber 10.30 a.m.	—	Dr. Barber 9 a.m.	—	—
***Fractures** ..... **1 p.m.**	—	—	—	Mr. Slesinger	—	—
***T. B. Dept.**	Dr. Marshall 5.30 p.m.	—	—	Dr. Marshall 1.30 p.m.	—	—
***Vaccines, etc.**	—	Dr. Eyre 9 a.m.	—	Dr. Eyre 9 a.m.	—	—
Orthopædics ..... **1 p.m.**	Mr. Trethowan	—	Mr. Trethowan	—	*Plasters only 1.30 p.m.	—
Gynæcology ..... **11.30 a.m.**	Mr. Chapple	—	Mr. Cook	—	Mr. McNair	—
Nervous Diseases & Psychological Medicine **9 a.m.**	—	—	Dr. Symonds & Dr. Gillespie	—	—	Dr. Symonds & Dr. Gillespie
Eyes .... **11.30 a.m.**	Mr. Morgan	Mr. Eason	—	Mr. Ormond	Mr. Morgan	—
Ear, Nose and Throats	Mr. Layton 9 a.m.	Mr. Mollison 11.30 a.m.	—	Mr. Layton 11.30 a.m.	Mr. Mollison 11 a.m.	—
Genito-Urinary **1 p.m.**	—	Mr. Thompson	—	—	Mr. Thompson	—
V.D. F. Daily 9 a.m. to 8 p.m.	—	Miss Rawlins 9 to 11 a.m.	Miss Rawlins 2 to 5 p.m.	—	Miss Rawlins 5 to 8 p.m.	—
V.D. M. Daily 9 a.m. to 8 p.m.	—	Mr. Lloyd 1 to 4 p.m.	Mr. Lloyd 1 to 5 p.m.	Mr. Lloyd 5 to 8 p.m.	Mr. Lloyd 9 a.m. to 1p.m.	—
***Defective Speech**	—	—	Mr. St. John Rumsey 1 p.m.	—	—	—
Dental .... **9 a.m.**	Mr. Doubleday	Mr. Lewin Payne	Mr. Pearce	Mr. Dowsett	Mr. Malleson	Mr. Pritchard
		Mr. Bull (Children)		Mr. Bull (Children)		
	Mr. Bulleid 2 p.m.	Mr. Messenger 2 p.m.		Mr. Bulleid 2 p.m.	Mr. Messenger 2 p.m.	

Correspondence.

General Lying-in Extension Fund.

SIR,—Londoners are justly proud of their hospitals, but few are aware that of the eleven large general hospitals, four only are of later date than the 18th century, and that the great development of this public medical service took place during the hundred years following Thomas Guy's foundation in 1721.

Accommodation for what we now call maternity cases developed a little later, between 1745, when the Middlesex Hospital arranged for attendance on women at their own homes, and 1765, when the "New Westminster Lying-In Hospital," now the General Lying-In Hospital, York Road, was founded, largely owing to the energy of Dr. John Leake.

This hospital was the fourth and last of these special hospitals. It was obviously needed for the large and growing populations of Southwark and Westminster. The three existing lying-in hospitals were situated at considerable distances—to the north-west, the Bayswater Lying-In Hospital (now Queen Charlotte's); to the north, the British Lying-In Hospital, Brownlow Street (now amalgamated with the British Hospital for Mothers, Woolwich); to the north-east, the City of London Lying-In Hospital, Aldersgate Street, still in existence in the City Road, where it has been since 1773.

Dr. Leake, a lecturer in midwifery at his residence in Craven Street, Strand (close to Northumberland House) in the *Public Advertiser* and in the *Gazetteer and New Daily Advertiser* of the first week in June, 1765, asked for voluntary subscriptions to "a fund already begun and considerably advanced under the patronage of the Right Honourable Lord Warkworth, President, with several gentlemen of distinction."

He was so far successful that in August of the same year he called a meeting of subscribers at Appleby's Tavern, Parliament Street, and announced that he had bought a piece of land near the south end of Westminster Bridge. A hospital was built on that site and opened in 1767. This building is still in existence on the south side of Westminster Bridge Road, and is now occupied by a furnishing company.

From that date the Hospital has been in continuous operation except during the period January, 1878, to October, 1879, when it was closed for important structural alterations and the improvement of the arrangements and equipment. In March, 1879 (Sir) Joseph Lister accepted the post of Consulting Surgeon, and continued to serve the Hospital in this capacity, and as President, until the year 1911, a fact of which the Hospital is justly proud. In 1880 the late (Sir) John Williams and (Sir) Francis Champneys, the present President, were appointed Physicians Accoucheurs to the Hospital, and under their auspices this Hospital was the first to practise antiseptic midwifery in this country.

Secondly, in this year 1879 too, the systematic training of midwives for service either in other hospitals or in private practice was begun at this Hospital. This has developed into the distinguished training school of the present day.

The present site in York Road was leased in 1824, a new hospital erected and taken into use in September, 1828, and a Charter obtained in 1830, under its present title, which indeed had been assumed in 1819.

Later, two houses adjacent to the hospital on its north side, and known as the Albany Baths, were taken over and included in a new lease in 1907. These houses were first used as a Nurses' Home, and it is in connection with them that this appeal for money has become necessary, as under the lease of 1907 we are bound to rebuild this structure before December 25th, 1930.

It is impossible to believe that these premises can ever have been satisfactory. They are now used for Ante-Natal Clinic, the Infant Welfare Centre, the Dental Clinic for Mothers and for the accommodation of some of the nursing staff of the hospital and for pupils. The rest of the nursing and domestic staff are housed in the hospital itself and in two houses which we rent in York Road opposite the Hospital. All this accommodation is, to say the least, indifferent and inadequate.

Four points must be emphasised:—

1. We *must* rebuild under the terms of our lease.

2. *We should in any case have to build* on account of the condition of the premises—almost derelict.

3. *We need proper accommodation for Nursing Staff and for Pupils.* The nurses have very heavy work, and modern opinion very rightly will not permit older conditions to continue.

4. *We need larger and more suitable accommodation for our Out-Patient Departments* and for Lecture Hall, Museum, etc.

Two Financial Points—

This is the first public appeal for funds since June, 1765.

The hospital section of the institution is solvent; it carries over a small credit balance from year to year. But the Training School is not.

We now aim at raising about £30,000, and we ask everyone to help to do this.

This Hospital has from its inception been favoured by Royal Patronage, and Her Most Gracious Majesty the Queen is the present patron.

Subscriptious should be sent to the Honorary Treasurer, Dr. J. S. Fairbairn, at the Hospital.

We are, sir,

Yours obediently,

MARGARET BIRKENHEAD,

Chairman of Appeal Committee.

General Lying-In Hospital,
York Road, Lambeth, S.E.1.
October 1st, 1927.

General Practitioners and Hospital Treatment.

DEAR SIR,—The panel system will form so large a part of the practices of students when they qualify that I venture to use the medium of the GAZETTE with regard to its relation to hospital treatment of panel patients.

We may, for illustration, give three types of hospitals: (1) Connected with medical schools, (2) large hospitals in industrial towns, (3) the cottage hospital. In the access for treatment of our own patients I obviously rule out (1), but (2) and (3) are intimate for our consideration. In some small districts there may be, say, 10 resident doctors, 5 on the hospital staff, and the absentee doctors are compelled to send their patients to be introduced to, and treated by, them. In larger towns there is a visiting staff of surgeons and physicians, with a limited number of general practitioners, who exclude their professional brethren who practice in the same locality. These conditions are lacking in a brotherly spirit, and should they increase and prevail our practices will be drained and we shall of necessity be obliged to gain admission to hospitals as whole-time men—a State service rising by seniority—a Colonel with £1,500 per annum, say, Captains £1,000, Senior Lieutenants £750 and crowds of 2nd Lieutenants £500 a year. We shall be officials and good-bye to the personal relation between doctor and patient.

The panel system, however, preserves the spirit of the family doctor—there is a choice and we know there are few changes. The question is: Is the treatment of a patient in (2) and (3) to be continued by the doctor of the patient when hospital treatment becomes essential, or handed over to a fellow practitioner? Are young qualified men, fresh from hospital, with the latest available equipment to be debarred from following their patient, deprived of the educational facilities of a hospital in their midst, and rusticated to writing panel prescriptions? To me it has seemed an amazing desolation for the younger members of our profession to contemplate.

As a step to bring it to an end (and reconcile) at the last meeting of the Middlesex Panel Committee I moved a motion which was carried unanimously. At the next meeting, October 6th, I shall move it be sent up to the Insurance Acts' Committee: "That it is essential that the Conference consider the relationship of practitioners to their patients in the matter of hospital treatment, and that in its opinion practitioners so desiring should have access under reasonable conditions to their own patients for treatment in local hospitals."

Yours faithfully,

RICHARD GILLBARD.

Dinner to the Mayor of Southwark.

DEAR SIR,—His Worship the Mayor of Southwark (Alderman T. E. Hewitt, J.P.), will be entertained at dinner by his colleagues and fellow citizens on Wednesday, November 2nd next, at the Wharncliffe Rooms, Hotel Great Central, Marylebone, N.W., in recognition of his civic and social services as Mayor during the past municipal year.

I am desired by the Dinner Committee to invite you and your friends to grace the occasion by your presence and to state that the patronage of ladies will be specially welcome. Dancing will take place immediately at the close of the dinner and musical programme, and tickets (price 13*s.* 6*d.*) will be obtainable from my office at the Town Hall, Walworth Road, S.E.17, in the course of a few days.

I am specially asked to point out that this charge will cover the dinner, concert and dance. Free refreshments will be provided (exclusive of alcoholic beverages) during the dance until midnight.

Will you kindly book the date and assist the Committee in once again making this annual function a grand success?

The Hotel Great Central is easily accessible by Bakerloo Tube to Marylebone Station.

Yours faithfully,

PERCY H. GRAY,

Town Clerk and Hon. Secretary.

The Biennial Dinner.

DEAR SIR,—May I remind your readers that the Biennial Dinner will be held on Friday, November 4th, at 7 p.m., under the Presidency of Dr. John Fawcett, at the Hotel Victoria, Northumberland Avenue? The following old

Guy's men have promised to act as Vice-Chairmen :—

H. G. Ashwell (1880)
H. E. Counsell (1884)
Sir Sidney Alexander (1886)
J. W. F. Jewell (1891)
A. H. Spicer (1896)
A. W. Ormond (1896)
H. M. Clarke (1905)
C. H. Mills (1909)
H. L. James (1911)
R. Passey (1912)
P. J. Watkin (1913)
C. H. Laver (1917)
P. O'Meara (1920)
R. Hale-White (1922)
K. O. Parsons (1924)
H. J. Selby (1925)
The President of the Residents

I hope that all those who intend to be present will immediately fill up their forms and forward them to me.

Yours sincerely,
E. C. HUGHES,
Hon. Secretary.

17, Wimpole Street, W.1.
October 3rd, 1927.

The invitations were sent out last Wednesday, and the following are those who have already accepted :—

1875 Sir Charters Symonds
1879 T. A. I. Howell
Sir William Hale-White
1880 H. G. Ashwell
1885 F. R. B. Bisshopp
1886 F. Beard
H. W. Drew
T. B. Hyslop
1887 H. J. Campbell
P. N. Randall
1888 C. F. Routh
G. Black
1889 N. E. Mitchell
1891 R. King Brown
1892 A. M. Daldy
S. G. Floyd
1893 V. Pendred
E. Graham Littles
1894 H. A. Munro
1895 W. Sampson Handley
C. A. Ensor
1896 A. G. Butler
W. E. Hills
1897 F. E. Fremantle
M. Way
R. Howard
1900 E. W. Goble
1901 A. W. Soper
1902 E. H. Griffin
P. N. B. Odgers
1903 J. S. Cooper
1904 A. F. Hurst
1905 E. C. Lowe
1906 G. W. Goodhart
P. C. Litchfield
1907 C. H. Ripman
J. E. A. Carr
1909 H. L. Attwater
1910 L. Bromley
H. W. Barber
1911 E. L. Elliott
N. Mutch
1911 H. L. James
E. Billing
F. Cook
1912 A. M. Zamora
T. P. Cole
H. J. Hoby
W. S. George
1913 C. S. Lane-Roberts
W. H. Ogilvie
W. E. Tanner
1915 R. Sells
R. Curle
1916 H. S. Walker
1918 F. Lawrence
A. H. Spencer-Payne
1921 M. E. Shaw
A. H. Douthwaite
1923 J. Lewin
1925 C. L. Worthington

Reviews.

Anatomy. Part VI. Bones. Catechism Series. Published by E. & S. Livingstone, Edinburgh. Fourth Edition. Price 1s. 6d.

PREVIOUS reviews of other books in this series have drawn attention to their limited sphere of usefulness. The advantage of the questionaire form is not at all evident in this particular instance in that no help can be accorded the student by the suggestion of unusual forms in which questions are likely to be expressed. A great deal of type and space might have been saved by requesting at the outset a detailed and ordered description of all the bones in the body as an alternative to repeated invocation in italics at the head of each small section.

A sound knowledge of the skeleton means everything in the study of anatomy and for a rapid revision of that knowledge just prior to the eventful day a set of bones and this small volume seem to provide all that is necessary. An adequate account of the ossification of each bone is included, and the size and price have the advantage of being handy for the student's pocket.

Surgical Nursing and the Principles of Surgery for Nurses. By RUSSELL HOWARD, C.B.E., M.S., F.R.C.S. Published by E. Arnold & Co. First Edition. Price 7s. 6d.

THE author, in his preface, says: "The basis of this book is a series of lectures on Surgical Nursing given to Probationers at the London Hospital."

The admirable arrangement of the matter and the lucid style in which it is written should make the book of great value to Nurses in training and to all who are interested in surgical nursing.

The book is illustrated by many excellent photographs and diagrams which greatly increase its value as a practical handbook.

Sport.

Rugby.

Guy's v. Gloucester.

LAST Saturday, October 1st, Gloucester were our visitors, and they paid us the compliment of bringing an exceptionally strong team for their only visit to Town this season.

Included in their ranks were Tom Voyce, the English International; David, the old Oxford Blue, at fly half; Boughton, the schoolboy International, at full back, apart from two or three well known men in Rugby circles at the 'Varsities. Guy's relied upon the team that did duty against Catford Bridge.

The conditions were far from favourable, and rain kept a large number of people away, but those who braved the elements were rewarded by one of the best sporting games seen at Honor Oak Park. It was a good clean hard struggle from start to finish. Both packs put in every ounce of energy and never spared themselves for a moment. Our forwards rose to the occasion in magnificent fashion, and they fully deserved all the congratulations bestowed upon them. It was an excellent performance against such formidable opponents—they not only held their own but, thanks to Myburgh's skilful hooking, dominated the scrums and heeled the ball out perfectly time after time. Every man did his job well, and their work in the loose was a feature of the match. Garland was ever ready to seize an opportunity, and on several occasions was only brought down by sheer force of numbers.

Facing the wind, Guy's were caught napping in the first two minutes. The visitors set up a strong attack and from the movement, in which Voyce, Smith and Hemmings participated, the last-named opened the scoring, for Boughton to add the extra points.

Following this, we were penalised for offside, and Boughton landed a penalty goal with ease. Thus, within ten minutes, we were 8 points to the bad, and things did not look at all hopeful.

However, a wonderful change came over the game. Smarting under this sudden onslaught our forwards fought every inch and gradually the visitor's defence was worn down. Then Cameron, with Garland in close attendance, managed to cross the visitor's line, but the kick against the breeze went wide.

From this point Guy's more than held their own, and several well engineered attacks were only frustrated on the goal line.

The interval arrived with our team attacking strongly, and Gloucester leading by 8 points to 3.

The second half opened in favour of Guy's, and after setting up a continual pressure Garland, seizing an opportunity, shook off two or three opponents and went straight for the line, with Durr following up. With only the full back to beat, Garland sent Durr in to score near the posts and to convert his own try.

Guy's and the visitors were penalised for offside, but nothing resulted. Boyle attempted a drop at goal, but the slippery ball was sent into the hands of the visitor's right centre and, going hard for our line, he raced three-quarters of the field before he was brought down.

The final whistle was sounded, and a very pleasant game ended in a draw of 8 points each.

Reference has already been made to the forwards and in particular Myburgh. With the exception of Ryan and Robinson both sets of backs were slow and lost a lot of ground by hesitation. Unfortunately, Preen had an off day and has not yet settled down. He appeared too anxious to get rid of the ball before drawing his man—perhaps this was chiefly due to the close attention Voyce paid to our fly half. Garland was always in the thick of the fighting, and again proved himself the opportunist that he is. Boyle was again sound at full back, whilst Popplewell skippered the side admirably.

After the heavy rain it was expected that the ground would be heavy, but, thanks to the draining improvements carried out by the Clubs' Union during the past month, the ground was in perfect condition. It not only held firm, but there were no signs of the mud that was formerly associated with our ground last season.

Guy's Team—V. G. Boyle; T. G. Robinson, D. F. Ryan, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, V. R. Preen; J. R. F. Popplewell (capt.), W. H. Myburgh, G. G. Cameron, R. G. Scholefield, J. Durr, C. D. Malone, A. Simpson-Smith, J. H. Cullinan.

Guy's v. Catford Bridge.

FOR our opening home fixture, September 24th, we entertained our old friends and rivals, Catford Bridge. The visitors included in their team two well-known Guy's men, namely, E. W. Hutchinson in the pack and J. G. van Schalkwijk at fly half. On the other hand, we made several changes in the team that was defeated at Coventry. Myburgh, Durr, Scholefield and Cullinan were included amongst the forwards

and T. G. Robinson appeared at right wing three-quarter.

It was a disappointing game from start to finish. It was obvious that the team was suffering from lack of training. With few exceptions, all the movements were ragged and disjointed.

No doubt the bustling tactics and good marking of the visitors put our backs off their game, but faulty handling and erratic passing was largely responsible for the number of good openings that were wasted.

As a result the forwards lost confidence and hugged the ball whenever the opportunity presented itself. Even then the forwards were not up to their usual standard, and it is seldom that Myburgh has such an off day.

Guy's set Catford to face a strong rain and attacked from the kick off. They were easily repulsed and sent back to their own 25, but Boyle relieved with a good kick to touch. Another good attack initiated by the forwards kept the visitors on the defensive, but erratic handling nullified any advantage that might have been gained.

Prior to the interval, there was a heavy shower which made the ball slippery and difficult to handle, but curiously enough our threes played with more confidence and twice came within an ace of scoring. Only splendid anticipation by the Catford centres prevented Guy's from crossing their line.

Resuming after the interval Guy's again attacked, but a good kick by van Schalkwijk brought relief and Catford exerted considerable pressure, but good work by Popplewell, Cullinan and then Malone kept the visitors out.

Eventually our backs obtained possession and a score seemed certain, but Lewis was hemmed into the corner and rushed into touch at the critical moment. Meikle and Davies, the visitor's centres, interrupted several promising movements, but near the end our efforts were rewarded by Lewis going over in the corner. Durr was entrusted with a difficult kick, but was unable to add the extra points.

From the kick off Cullinan "marked," and play was again transferred to the visitor's territory, but only for a short time. Catford then pressed heavily, but Boyle defended splendidly. Five minutes from the end Guy's were penalised for offside and Hutchinson only missed the goal by inches.

Result—Guy's 3 points, Catford Bridge 0.

Guy's Team—V. G. Boyle; T. G. Robinson, D. F. Ryan, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, V. R. Preen; J. R. F. Popplewell (capt.), W. H. Myburgh, G. G. Cameron, R. G. Scholefield, J. Durr, C. D. Malone, A. Simpson-Smith, J. H. Cullinan.

Association.

Guy's v. Old Hurst Johnians.

THE Hospital XI opened the season against the Old Hurst Johnians, and were defeated by 6–2. We must console ourselves with the fact that we fielded a somewhat scratch eleven, and, coupled with this, that D. B. Smallshaw was badly hurt very early in the game, and for the rest of the time he played at outside left. As a result of this, our defence was weakened to some extent. One might also add that, admitting our opponents were better than we, the score of 6–2 rather overestimates their superiority.

The game opened evenly with both sides attacking, and after 15 minutes play Guy's opened the scoring when Evans netted from a nicely placed pass by Scanlan. The Old Hurst Johnians attacked more strongly now, and were soon rewarded when their inside left scored. They continued pressing and before half time arrived they added two more goals, and we thus changed ends with the score 3–1 against us.

The second half opened with Guy's doing most of the attacking. On two occasions, however, our opponent's forwards obtained the ball with our defence spread wide apart. They therefore had clear runs for goal and they did not waste their opportunities. During this time Lomax played well in goal and made two very good saves of what seemed certain goals.

For a period of ten minutes after this our forwards pressed strongly and did everything but score. At last a corner was given. Scanlan took a well-placed kick and Ashling, with a really first-class shot, scored our second goal.

Our opponents replied with yet another goal, and shortly after this the final whistle blew. We must not lose heart at this first reverse, as everything seemed against us, and, with a little better fortune, we can hope for very much better results.

Guy's Team—Lomax; Ellis, Wright; Blaikley, Smallshaw, Winston; Ashling, Cantor, Evans, Eckford, Scanlan.

Swimming Club.

The American Banks of London S.C. Gala.

AT the Hoxton Baths, on Friday, September 16th, at the above club's gala we met and defeated the Westminster Bank S.C. team by 7—6. The game was very close

and keen and was marked by Malone's shooting into the shallow-end goal during the second half of the game. The team were unfortunate in lacking their usual goal-keepers, and E. L. Monkhouse acted as a substitute. It is not easy to play in this position and Monkhouse found it rather a strain; unfortunately, too, he got cramp just after "half" was whistled and had to retire for the rest of the game, Kark going inte goal. We admire the spirit that led the Westminster Bank to play one man short from that moment in order to even up the sides. We opened the scoring with a fast shot from J. W. H. Jones, but faulty marking and a goal-keeper new to the game soon had the scores 2—1 against us. Hard play followed and half time came with the score 5—4 in our favour. Good work by the team enabled Malone to put us ahead further, within half a minute the score was 6—5, and then Monkhouse had to leave. Malone scored again and just before "time" Westminster replied, leaving us the winners, 7—6.

Guy's Team.—E. L. Monkhouse, C. E. M. de Gruchey, T. L. Kark, L. Brown, C. D. Malone, J. W. H. Jones, O. M. H. Jones.

The Fillebrook S.C. Gala.

THIS gala was held in the Leyton Baths on Saturday, Saturday 17th, when the Hospital won the Inter-Club Invitation Team Race from Fillebrook, Cambridge and Harlow, and won the water-polo from Cambridge. The team-race was won easily by about 12 yards, each of the Hospital men gaining on his length, but the polo proved to have more fight in it. However, speed and combination halped us to win 4—2. The marking was closer, the spoiling better and the game full of incident. Clegg played a sound game in goal, proving that we do not really lack for goal-keepers and discounting the fear that in the coming years the Club will lack for one. C. E. M. de Gruchey played a very sound game at back and seldom gave his man any sort of chance. J. W. H. Jones was too fast for his opposing number and O. M. H. Jones played an enterprising game.

Guy's Team.—W. B. Clegg, C. E. M. de Gruchey, T. L. Kark, B. Abbott, L. Smith, J. W. H. Jones O. M. H. Jones.

Hospital Information, etc.

Papers by Guy's Men.

H. B. Densham, B.Sc. The Mechanism by which the Electrical Resistance of the Skin is Altered, *Quart. Jour. Med.*, 1927, xviii, 175.

T. B. Layton, D.S.O., M.S. The Relation of Nasal Polypi to Inflammation of Accessory Sinuses of the Nose, *Proc. Roy. Soc. Med.*, xx, 1927, 1,745; *Sec. Laryngol.*, p. 81.

W. M. Mollison, F.R.C.S. Three Cases of Epithelioma Treated Successfully by Deep X-Rays, *Ibid.*, 1,772; *Ibid.*, 108.

C. Gill Carey, F.R.C.S. Sarcoma of the Tonsil Treated by X-Ray Therapy and Excision, *Ibid.*, 1,772; *Ibid.*, 108.

W. H. Sodeau, D.Sc., F.I.C., F.Inst.P., and C. S. Gibson, O.B.E., M.Sc. The Use of Plaster of Paris as an Impression Material, *Brit. Dent. Jour.*, 1927, xlviii, 1,089.

F. D. Saner, F.R.C.S. The Treatment of Open Fractures of the Limbs, *Lancet*, ii, 1927, 672.

Herbert L. Eason, C.B., M.D., M.S. Co-Operation Between Voluntary and Municipal Hospitals, *B.M.J.*, 1927, ii, 575.

C. Worster Drought, M.D., M.R.C.P. The Treatment of Insomnia: (1) General Considerations, *Lancet*, ii, 1927, 720.

Appointment.

Isidore Samuels, L.D.S., R.C.S.Eng., to be Honorary Dental Surgeon to the Royal Devon and Exeter Hospital, Exeter.

Change of Address.

H. A. H. Harris, Fay Gate, Chelmsford.

Bernard Kaplan, M.R.C.S., L.R.C.P., Cawood Street, Port Elizabeth, South Africa.

Births.

MARSH—On September 4th, 1927, to Edna, wife of Alan R. Marsh, of Winton, Croydon Road, Beckenham—a daughter.

HALSTEAD—On September 11th, 1927, at 102, Woodcote Valley Road, Purley, to Eileen, wife of Oliver Halstead—a daughter.

Marriages.

HACKER—SCOPES—On Thursday, June 2nd, 1927, at the American Mission Church at Kodaikanal, by the Rev. J. T. Todman, L.M.S., assisted by the father of the bride, Edith Anne Hacker, late Nursing Superintendent, L.M. Hospital, Neyyoor, daughter of the Rev. I. H. and Mrs. Hacker, "Brooklyn," Kodaikanal, to the Rev. Wilfred Scopes, B.A. Missionary, London Missionary Society, at Kamalapuram, Cuddapah District.

HARRIS—WILDSMITH—On September 21st, 1927, at Brompton Oratory, Harold Augustus Henry Harris, F.R.C.S., only son of Mr. and Mrs. Augustus Harris, of Windsor, to Eileen, youngest daughter of Mr. and Mrs. Alfred Wildsmith, of Ealing.

Death.

ALLWORTH—The death is announced of Alfred Leigh Allworth, of West Hill, Sydenham, who qualified M.R.C.S., M.R.C.P., 1893, and L.D.S. 1894

EDS. { G. M. H.
E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *October 22nd, 1927.* *Number 1024*

PASSIM

RARELY is it possible to obtain "something for nothing" in this world. Take, for instance, the man who regularly frequents the racecourse, hoping to back the winner, or the busy housewife who buys innumerable bars of Shinagain soap so that she may have enough coupons to enable her to obtain an electro-plated teapot, absolutely free. The bookies and the directors of the soap factory grow fat on the foolishness of such as these.

We have, however, at last found out how to get good value for our money with a chance of a free gift as well. By buying the *Help Yourself Annual* we have obtained not only a book well worth the few pence that we paid for it, but have also become a member of the Help Yourself Society. This remarkable society every year distributes to those of its members who are lucky over 1,600 gifts, and what gifts there are amongst them. By joining this society you *may* become the possessor of either a 1928 14 h.p. Humber saloon motor car, a dinner and dance for a party of eight at the Savoy, a case of bananas, a fat goose and a box of pills, or six pairs of guaranteed holeproof socks, to mention just a few of the many gifts to be obtained.

The way to join the society is by filling up the form inserted in this issue and returning it to the Appeal Secretary. The Hospital badly needs money, and the proceeds of every book which is sold by our Hospital goes to Guy's.

The "Help Yourself Society" is organised by the Stock Exchange Dramatic and Operatic Societies' Christmas Charity Fund, which last year, as a result of the disposal of upwards of 400,000 books, obtained over £42,000 for distribution to charities. Guy's will this year receive a share of the total amount obtained for distribution, and the amount of our share will depend on the amount of books we sell.

We feel sure that both the charitable and sporting instincts of all Guy's men will be roused by this Christmas charity effort. So fill in the form on the inserted leaflet without delay and return it with the 2*s.* 6*d.* subscription and 4½*d.* for the postage of the book to the *Appeal Office, Guy's Hospital, S.E.*1.

WE publish on another page the preliminary announcement of a performance of *The Adventure of Lady Ursula*, by Anthony Hope, which is to take place on Monday, November 28th, at the Scala Theatre, Charlotte Street, W.1, at 8.15 p.m. The entire proceeds of this performance will be given to the Hospital. We urge those who can do so to take tickets at once, and those who are unable to attend to send a donation, no matter how small, to the Treasurer, Guy's Hospital, S.E.1. The Hospital at the present time is badly in need of funds. £100,000 is still needed to free it of debt, while a similar sum is wanted annually from sources other than Endowments to enable the Hospital to pay its way. Guy's is no longer a rich Hospital. Further details of this performance will be published in our next numbers.

WE note that Dr. Fawcett presided at the opening meeting of the Guild of Public Pharmacists, held on the evening of Wednesday last, at No. 17, Bloomsbury Square, W.C. Members were much entertained by the address on "An Old Pharmacopœia, Gerards Herbal, 1633," given by H. L. Eason, Esq., C.B., C.M.G., M.S.

Obituary.

Professor Adrian Stokes, O.B.E., D.S.O., M.D.

THE tragic death of Adrian Stokes in the very prime of life, when many years of useful work seemed to lie before him, has come as a staggering blow to a multitude who knew and loved him. The tall athletic figure, so familiar a part of the everyday life at the Hospital, walking briskly across the park between his laboratory and the wards with a smile of greeting and a cheery word for this or that friend, or seated at his bench, busy always, but always ready to lay aside his own work to help colleague or student who came to him for assistance, will be remembered and sadly missed by all. To those who were privileged to know him intimately, had shared their thoughts with him and had perhaps tasted of his ready generosity and sympathy the loss is

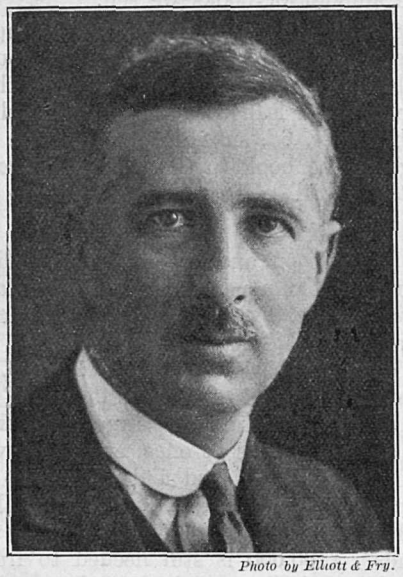


Photo by Elliott & Fry.

irreparable. No man ever gave more freely of his store to those around him or was more genuinely helpful to those in need. He was a great-hearted Irishman, with all the lovable characteristics of the best of his race. Bluff and outspoken, almost rude at times in his anxiety to carry a point, he undoubtedly made some enemies, but those who understood him realised that the personal element never entered into his criticism or argument, and that he was incapable of nursing a grudge, though he might be equally incapable of taking steps to clear up a misunderstanding. Kind and generous to whom he trusted, but quick to resent anything underhand or insincere, he warmly deserved the esteem and affection in which he was universally held.

Of the loss to science it is difficult to make an estimate. He had all the attributes of a great investigator of disease, unbounded capacity for hard work, a brilliant intelligence, supported by a profound knowledge which had been acquired both by exhaustive reading and personal experience and, above all, enthusiasm and a power of weighing accurately the value of the published work of others. His earlier papers, and those of the war period, showed a power of clear thinking and an aptitude for scientific research rarely equalled, but it must be remembered that until 1922 he had never been settled for long enough in one place to produce the output of original work of which he was undoubtedly capable, and that during the last four years his time was fully occupied in adapting himself to his changed surroundings and in perfecting himself in those branches of pathology with which, as a bacteriologist, he had previously been comparatively unfamiliar. Had he lived it is impossible not to believe that he would, so to speak, have completed the process of "digging himself in," and with more time to devote to his own researches would have added much to medical knowledge.

Adrian Stokes was born on February 9th, 1887. His father was John Henry Stokes, and his grandfather and great-grandfather were the great Dublin Physicians, William and Whitley Stokes, from whom he must have inherited much of his scientific ability. Educated at St. Stephen's Green School and Trinity College, Dublin, he had a brilliant career as a student, and graduated M.B., B.Ch. in 1910 and M.D. in 1911. After doing resident appointments in hospitals in Dublin and Brighton he went for some months to work at the Rockefeller Institute in New York, returning to Dublin as assistant to the late Dr. O'Sullivan, Professor of Pathology at Trinity College, in 1913. At the outbreak of the war he at once volunteered for service and went to France on August 11th, 1914. It was here that he first found full scope for the qualities with which he was endowed, and here that he gained the reputation by which he will chiefly be remembered by those outside the two schools with which he was connected. From the day on which he landed in France until he finally left the Army of Occupation in Germany, every ounce of his tremendous energy, all his

clinical skill and scientific knowledge, were directed towards the improvement of the Medical Services. Completely unselfconscious and indifferent to the opinions of others when he felt himself to be in the right, his very enthusiasm carried conviction, and he was able to initiate and spread through the Army new methods of treatment and prevention of disease which were the means of saving countless lives.

His pioneer work in connection with the "carrier" problem in typhoid, spirochætal jaundice and wound infection, of which several valuable papers in the *Lancet* and *British Medical Journal* were the outcome, has received the recognition to which it is entitled and will live. But although working as a bacteriologist and busy morning, noon and night in his laboratory, he was always ready in times of stress to give assistance in any sphere in which he saw that help was needed. As an example of his versatility and ingenuity his action in connection with the treatment of gas poisoning may be cited. When the C.C.S. to which he was attached was suddenly crowded with the victims of a phosgene gas attack it was found impossible to administer oxygen to the great numbers by the old-fashioned funnel method. Stokes at once conceived the idea of giving the oxygen by means of nasal catheters to several patients from one cylinder. His method became general throughout the Front, and has since been widely adopted in civil practice. His co-workers can recall innumerable similar instances of helpful suggestion. It mattered nothing to him who received the credit for innovations of this kind so long as the object of improving the lot of the sick and wounded was achieved, and too often it was claimed by others. For his services during the war he was awarded the D.S.O. and O.B.E. and the Belgian Order of the Crown, besides being mentioned several times in despatches.

In 1919, on demobilisation, he went back to Dublin as Professor of Bacteriology, and in the following year, as an outcome of his work on spirochætal jaundice, he was asked to join the Rockefeller Yellow Fever Commission in West Africa, but the six months he subsequently spent in Lagos were without result, owing to a complete lack of material to work upon. He returned to find his country in the throes of political strife, and life in Dublin could not fail to prove distasteful to one who held his unyielding loyalist views. When therefore in 1922 the Sir William Dunn Professorship became vacant it is not surprising that he accepted an unsought invitation to stand for the chair.

He came to Guy's in the autumn of that year, and with characteristic energy threw himself into the task of adapting himself to the new surroundings. His immediate and lasting popularity is a living testimony of the success which he achieved, but few probably realised what an amount of reading and study it took to accumulate the vast store of accurate information on which he was able to draw whenever his help was sought in the elucidation of any pathological problem. From the first he took a keen interest in the reorganisation of the teaching in his department, and it was due to him that the pathological course was increased from three to six months' duration. When he found that the practical classes were becoming too crowded for him to give individual attention to the students he at once sacrificed his own time to double them. As a teacher he was immensely popular, and his lectures and demonstrations were always crowded. Although perhaps not a good lecturer in the orthodox sense, he was able by his vivid personality and an originality and quaintness in his descriptions to inspire a desire for learning, of which a lecturer of greater oratorical gift might have been totally incapable. His laboratory was open at all times to all who would come to him for advice or assistance, and to those working there he would give help unstintingly, invariably refusing, when a paper came to be written on an investigation for which he had been responsible, both in its inception and in the major part of its carrying out, to allow his name to appear in connection with it. This attitude was undoubtedly mistaken, and was unfair both to himself and to the collaborator, but it is an instance of the spirit of generosity which characterised all his actions.

Outside his work he was a delightful companion, a lover of fresh air, with a child's capacity for finding enjoyment in simple pursuits. A keen sportsman, he played many games well. He was in his cricket eleven at college and more recently became a member of the M.C.C. His flat in Maida Vale was close to Lord's, and he made full use of the club premises, playing squash rackets there regularly twice a week. He was an enthusiastic fisherman and an excellent shot, and his summer holiday was generally spent fishing on some river in Ireland, while a day of every week in September was always devoted to a shoot in Essex, of which he was a member. On these occasions he was supremely happy, and whether the sport were good or bad his enthusiasm knew no bounds.

In April of this year Stokes was pressed to rejoin the Rockefeller Yellow Fever Commission, whose efforts were still without tangible result, and, obtaining a six months' leave of absence from the Hospital, he sailed for Africa on May 11th. Of his work at Lagos no definite details are as yet

known, but one may infer from his letters, although he claims no credit for himself, that his coming brought the stimulus it needed to the Commission, and that their researches were at last approaching a successful issue. In his last letter, dated August 26th, he wrote: "We are a bit full of ourselves as we have the fish hooked all right, right down in the belly, and unless we are careless and break the tackle it will only be a question of time. The time may be a question of years, but it must come. He rose to a grey monkey in May and we hooked him fair early in July, and now we can transfer it by blood or mosquitoes at will, and can protect the animals by convalescent serum and so on. Of course, the gaffing of the bug will be the thing that takes time, but getting a successful animal is a first and essential step. We have about 90 per cent. of successful transfers with blood and about the same with mosquitoes, and we have had about a dozen animals die, so we think it is very nearly certain the pathology and clinical picture is good on the whole."

It is a cruel misfortune that he should have lost his life just when the threshold of success had been gained. On the evening of September 15th he was taken suddenly ill while at dinner, and on the following day, when it was clear that he had contracted yellow fever, he was removed to the European Hospital. Here for two days he appeared to be holding his own, but on the third day the disease was obviously getting the upper hand, and he passed gradually into coma. He died peacefully on the evening of Monday, September 19th, and was buried next day in the Ikogi Cemetery after a service at the Colonial Church, conducted by the Bishop of Lagos.

So ended a life of promise, perforce but partly fulfilled—a life of great usefulness and of singular devotion to duty and to the advancement of scientific knowledge, and of constant thought for the happiness of his fellow men. May the example he set be followed by those whose welfare he had so much at heart.

Dr. Beeuwkes, Director of the West African Yellow Fever Commission writes:

"The tragic death of Dr. Adrian Stokes is a very heavy blow to the members of this Commission and his numerous friends on the Coast. We were all devoted to him because of his kindness, strong character and large heart, and admired him for his outstanding ability and his enormous energy. His colleagues in the laboratory who have been so closely associated with him will feel his loss most keenly while continuing the work which has made such satisfactory progress. I feel that I have lost a close friend. During a recent illness when I developed an infection of the thigh he insisted on taking charge of my case, made and applied poultices day and night, and later made all dressings personally, even up to the evening on which his own illness developed.... A true scientist, in illness as well as in health, Dr. Stokes appeared to have no regard for himself. He insisted that mosquitoes be fed and that blood be drawn for experimental purposes before he was taken to the hospital. Up to the time he passed into coma his interest remained centred in the work, and all his questions referred to the outcome of the experiments. . . .

"We have every reason to believe that his infection occurred in the laboratory, but we have as yet no definite idea how or when it was contracted.

"I fully realise the great loss to London University and to Guy's Hospital. Will you kindly transmit the sympathies of our Commission to his many friends in your Institution?"

Change of Address.

H. C. C. Taylor, 15, South Street, Derby.

Ernest D. Bascombe, Ardrun Lodge, 14, Wimborne Road, Bournemouth.

K. H. Hole, from 4, Upper Knollys Terrace, Plymouth, to Medical Dept., Admiralty, Queen Anne's Chambers, Tothill Street, S.W.1.

C. H. Colwill, 4, Barn Rise, Wembley Park, London.

H. E. Filmer, 24, High Street, Maldon, Essex.

W. Gordon Sears, 42, Copley Road, Streatham, S.W.16.

Papers by Guy's Men.

Maurice M. Mitman, M.B. A Small Outbreak of Erythema Nodosum, *Lancet*, ii, 1927, 751.

Hector C. Cameron, M.D., F.R.C.P. Dentistry and the Nervous Child, *Brit. Dent. Jour.*, xlviii, 1927, 1,177.

R. Hale-White, M.C., M.R.C.P., and W. W. Payne, M.B., B.S. The Diagnostic Value of Dextrose-Tolerance Curves, *Quart. Jour. Med.*, 1927, xx, 457.

A. F. Hurst, M.B., F.R.C.P. Pathogenesis, Prophylaxis and Treatment of Pernicious Anæmia, *Brit. Med. Jour.*, ii, 1927, 676.

J. F. H. Stallman, M.B., F.R.C.S. Chronic Intussusception in Children: A Criticism of the Term, with a Report of Nine Cases Occurring in Children, *Annals of Surgery*, 1926, lxxxiv, 735.

The Services.

K. H. Hole, Surg.-Cmdr., R.N., from *H.M.S. Frobisher*, China Station, to the Navy Medical Department, and as Assistant to the Medical Director-General.

Indian Medical Service.

Lieut. S. C. H. Woseldine to be Captain.

Appointment.

Hugh Barber, M.B., M.R.C.P., has been appointed Visiting and Consulting Physician to the Derby Poor Law Institution.

An Epidemic of Yellow Fever at San Salvador.

EL SALVADOR, which is the smallest Republic in Central America, was in August, 1924, the victim of an outbreak of yellow fever. The state is one of the most progressive and thickly populated in Central America, and the products of civilisation are brought to the homes and remote villages of the natives by European and American travellers, who are constantly passing through it. The people, Moors and Indians, are mostly descendants of the Spaniards, and they obtained their national independence from Spain over a century ago.

San Salvador, the centre of the outbreak in 1924, is built on the plateau of a volcanic mountain of altitude about 2,500 feet, yet not sufficiently high to render those who inhabit it immune from the ravages of yellow fever and malaria. For over three years there had been no cases of the fever "reported" to the health authorities, although it was known that isolated cases had occurred among the country people. It was with feelings of dread that the American colony considered the possible results of this new outbreak of the disease, as they knew by past experiences in Panama and Cuba the danger of such an outbreak in that climate in the dry season getting the upper hand. Accordingly, they cabled to New York for vaccines to be used as a prophylactic method of treatment. The matter was referred to the Rockefeller Institute, who decided to send out doctors, who had devoted many years to the study of the life and habits of the mosquito and its various fever producing abilities, to cope with the outbreak. The water in these hot countries is usually stored in *uncovered* tanks and small reservoirs—or "pilas" as they are called by the natives—so that, without the work and interest of the American residents in these countries the mosquito would be given every facility to breed. They are, however, educating the native population, who are singularly lacking in enthusiasm in their help to stamp out this deadly disease, that tanks for water must be emptied and dried every day, and all stagnant water covered with kerosine or paraffin. A systematic inspection is made by inspectors of every house at least once a week, and all householders are fined heavily if larvæ are found in their houses.

If no microscope is available a mild attack of yellow fever can easily be mistaken, during the first three days, for malaria, relapsing fever and dengue fever.

The incubation period is usually from 3–6 days, rarely more. The patient at first feels depressed and unwell and very soon he has a rigor and some fever. All the mucous membranes become highly congested and later may give rise to severe hæmorrhage. In the mouth a raised line on the gums is to be noticed in the early stages; the tongue is red with raised papillæ. The conjunctivæ are infected and, later, tinged with yellow. Epistaxis may occur. The skin may become jaundiced during the third to tenth day. The patient complains of nausea and may vomit. At first this may be yellow, later coffee-ground or black and typical of hæmatemesis.

The respirations are at first slightly quicker than normal, though quite early in the disease they become much slower and of a "sighing" nature.

The pulse rate is not usually increased in proportion to the temperature and about the third day is liable to great depression. Diminution in the quanity of urine passed is an early symptom. Albumen is nearly always present and, later, blood—usually a complication in women.

Hæmorrhage from the stomach and intestinal mucous membranes give rise to blood in the stools. Irregular menses may be one of the first symptoms. On palpation there is marked tenderness over the kidneys, also general epigastric tenderness. The patient complains of severe backache, which nothing seems to relieve.

There is general catarrh of the nasal passages and some bronchitis, due to the congested state of the mucous membranes. Pneumonia may supervene as a serious complication.

Treatment—

This is based largely on the amount of congestion and hæmorrhage. At the onset a mild purgative is given, preferably a saline. Later the bowels can be kept active by mild doses of milk of magnesia, 1 dr. every hour. This may not be necessary as often the increase of bile is sufficiently irritant to keep the bowels active.

For diet only water, filtered and boiled, need be frequently given in small quantities at a time, together with small pieces of ice or a little Vichy water as a slight change. Weak brandy and water should be given when there is great depression of the pulse. For six days water only is necessary, no ill effects of this "diet" having so far been recorded.

After all signs of hæmorrhage and the vomiting has ceased, strained fruit drinks and tea without milk may be given. Later, chicken broth for a day or two, gradually increasing to a light diet. An error in diet in the early stages may lead to fatal consequences.

The urine must be measured at least every four hours, and any appreciable decrease treated. Mild doses of urotropine, gr. v, should be given every four hours if there is serious diminution in quantity.

Rest and diet are very important factors in the recovery of the patient. Tepid sponging may be given and an "alcohol rub down" after, always taking care not to exhaust the patient by frequent turning. Mouth washes should be alkaline and frequently given; soda bicarbonate is good and usually obtainable. Any treatment likely to cause shock—*i.e.*, ice packs, iced enemata (beloved by native doctors), etc.—should be strictly avoided.

Alarming symptoms arise suddenly in this disease, and care must be taken never to leave the patient alone until convalescent.

Medical Treatment—

As ordered by Dr. Hanson of the Yellow Fever Commission, Rockefeller Institute, New York.

One attack of yellow fever gives immunity; a vaccine has been prepared which is believed to give immunity, lasting from six to twelve months.

Method—

Two doses, 1–2 c.c. each, with a five days' interval, are given. Each dose is divided into half and given in two separate injections, *e.g.*, 1 c.c. into the right arm the first day in two injections, 1 c.c. into the left arm the sixth day in two injections and well massaged after this method aids absorption.

The reaction to these injections varies in different people; in some it produces mild symptoms of yellow fever, which pass off after a few hours. In others the arm may become œdematous. Only in extreme cases of low health is an abscess likely to form if aseptic precautions and massage have been thoroughly carried out. For those who "contract" the disease before reaching the immunity period—or have not been treated with the vaccine—an anti-icteroidic serum has been prepared. The serum is given intravenously, 25 c.c. doses, at intervals of 6–8 hours until the general improvement is maintained.

A preliminary dose of the anti-icteroidic serum is given, consisting of 1–2 c.c.'s to test for anaphylaxis, and if no unfavourable reaction is noted the remainder of the 25 c.c.'s can be given 1½ hours later.

The prognosis is bad because yellow fever is usually not diagnosed early, and the patient dies during the first few days or later from excessive hæmorrhage, albuminuria and exhaustion. Toxæmia is the most serious symptom.

This type of patient is usually a native, poor and ignorant, living in the low swampy ground near the coast. Previous experience has taught them that this kind of fever usually proves fatal and is infectious, so they either sit around and watch the victim suffer and die or make an effort to bring the patient to the nearest doctor or hospital, perhaps a matter of several days' journey, the patient being carried slung between poles in blankets, and is usually dead on arrival at the hospital.

Should the patient be fortunate enough to be promptly diagnosed, treated with serum, and properly nursed there is no reason why this disease should prove more fatal than many other of the tropical diseases. If the former state of health should have been unsatisfactory the outlook is very bad.

So deadly is this fever known to be, especially to foreigners, that there is one recorded instance of a native M.O. attending an Englishman in South America who, after diagnosing his case as yellow fever, left, remarking, "I will order your coffin for to-morrow." The patient was not so pessimistic, but took castor oil and is alive to tell the tale.

At the time of the outbreak in 1924 the native isolation block at San Salvador consisted of a one-storey building. This was divided into mosquito screened spaces containing one bed and perhaps a chair. Over 90 cases were brought to this house, known as the "Casa del Muerta," or house of death, and no cases sent there recovered. European and American patients were brought to the nursing home "La Casa de Salud" and treated there by the medical officers sent by the Rockefeller Institution. These patients had had vaccine treatment and were awaiting their period of immunity when they became infected. Descriptions of some of the cases treated may prove interesting.

Case 1—

A young German traveller, newly arrived from Honduras, applied for vaccine treatment only to find that the supply had given out until the arrival of the next shipment. He was naturally of a nervous disposition, which was intensified by his hotel being in the area of the recent cases. After a few days he reported sick, and the onset was sudden. He went to bed the previous evening with a severe headache and in the *early morning* had a rigor. The time of the occurrence of the rigor is important, as this may be the only definite symptom on which to base an early diagnosis. Characteristically these early rigors occur before sunrise. On admittance his temperature was 39.5° C., pulse 112 and respirations 30 per minute. He had general aching of his limbs, backache and a slight sore throat, with a raised line on his gums. Less than half-an-hour later delirium set in, with sighing respirations, rapid weak depressive pulse and extreme restlessness, it being difficult to keep

him from throwing himself out of bed. His urine was scanty and full of albumen. A small dose of anti-icteroidic serum, $\frac{1}{5}$ c.c., was given intravenously, and two hours later was followed by another 20 c.c.

Gradually the restlessness ceased. The respirations approached the normal, the pulse was stronger and the muttering delirium ceased. The patient was conscious a few hours after the second dose was given, and he sank into a fairly peaceful sleep. Weak brandy and water was given each time the patient wakened.

On the evening of the third day of the illness the temperature was normal, the pulse 68 and the respirations 20 a minute. The patient made a good recovery, one week later being able to walk round his room. The lowest amount of urine passed was 27 ounces in the 24 hours. Janos water was given as an aperient for the first two days, milk of magnesia for two more days, after which the bowels acted normally.

This patient was fortunate in being promptly diagnosed, his only hæmorrhage being a slight oozing from the gums.

Case 2—

This was a patient who became infected two days after his second prophylactic dose of vaccine, and the attack was quite mild. For two days the patient complained of severe backache, headache, shivering and a sore throat. The urine contained albumen. The temperature on admission was 39.6° C., the pulse 96 per minute. The patient did well and was allowed up on the fourth day.

Case 3—

Infection took place five days after first prophylactic injection of vaccine. Patient was admitted with a history of a rigor before sunrise. Her temperature was 38.6° C., pulse 112 and respirations 48 per minute. On the third day she developed symptoms of pneumonia, her temperature being 40° C., pulse 120 and respirations 40. The conjunctivae and skin were jaundiced. By the sixth day she had improved, the temperature fell by lysis, and she made a good recovery.

These few cases were typical of those which were admitted during the epidemic. None of the cases had a fatal ending, thus showing that prognosis is not so grave when prompt and proper treatment is available. M. G. A.

Diabetes and Carcinoma of the Pancreas.

THIS patient, A. B., a church organist, whose father died at the age of 89 and grandfather at 101, was not destined to enjoy a like longevity.

His life up to the age of 64 had been singularly free from illness and then, a year ago, the classical symptoms of a voracious appetite, an insatiable thirst and a troublesome polyuria proclaimed the onset of diabetes. His doctor restricted his diet and gave him insulin, and the patient was able to carry on fairly well.

Two months ago the heavy feeling which he had been experiencing for some time in the pit of the stomach resolved itself into a gnawing pain, which gradually grew worse until it became a perpetual source of misery. His weight too had dropped alarmingly—from 14 to 10 stone in one year, one stone being lost in the last month.

In this condition he sought advice at Guy's and was admitted to Clinical Ward. His loss of weight was very apparent all over his body, and especially over the abdomen, where the skin lay in large loose folds. He was rarely free from pain and at times it was most severe, so that morphia had to be prescribed two or three times daily.

The pains had no relation to the taking of food they were almost continuous, being present at night also, and were unaccompanied by nausea or vomiting.

Palpation of the abdomen left little doubt as to the presumptive diagnosis. Tenderness was diffuse over the epigastrium, and a hard lump was palpable in the region of the umbilicus. The lower border of the liver came down about two inches below the costal margin, but no nodular irregularities could be felt.

The urine contained large quantities of sugar, but no acetone, and the blood sugar was 3 grms. per cent.—about twice normal. The blood gave a negative Wassermann reaction.

X-ray of the alimentary tract showed no abnormality of lumen due to intrinsic or extrinsic disease.

The pancreatic efficiency tests were of doubtful value. The combined fat content of the fæces was estimated at 57.5 per cent., the normal percentage being 15 to 25; the diastatic index was within normal limits. Loewi pupil test gave a negative result and no undigested meat fibres or starch granules were detected in the fæces.

A diagnosis of carcinoma of the pancreas, with secondary deposits in the liver, was made by Dr. Marshall.

Laparotomy was one of the two possible ways of confirming the diagnosis and, as the patient was all too eager for something to be done quickly, Mr. Davies-Colley consented to operate in the faint hope of finding an operable condition.

On opening the abdomen the omentum was seen to be studded with secondary deposits. The liver had many secondary nodules and, as fas as was possible to see, the primary growth came from the body of the pancreas. The condition was obviously quite inoperable, and the abdomen was closed.

The wasted and very feeble patient stood the operation badly and he died five days later, having developed a post-operative pneumonia.

The post-mortem examination confirmed the diagnosis of a carcinoma of the pancreas, with secondary deposits in the liver and omentum. The primary growth had destroyed all the pancreas except the tail and a portion of the head, so that the bile duct had remained unaffected.

Microscopical sections showed that the carcinoma was of the alveolar type. The pancreas did not show any areas of chronic inflammation.

In determining the pathology of this case three possibilities present themselves :—

(1) There had been a primary malignant disease of the pancreas that had given rise to no symptoms until sufficient islets of Langehans had been destroyed to cause diabetes.

(2) The original lesion was a chronic pancreatitis, upon which first diabetes and later carcinoma developed.

(3) The association of diabetes mellitus and a pancreatic neoplasm was purely a coincidence.

That glycosuria sometimes occurs in advanced cases of chronic pancreatitis and malignant disease, as well as in acute pancreatitis, is well recognised. However, it is far more common in chronic inflammation than in carcinoma. In 113 cases of malignant pancreatic disease, Miraillie and Oser describe 21 with glycosuria. Pierce had one case with intermittent glycosuria and one with diabetes in 30 cases. However, it is always a late symptom if present at all, pain being a far earlier one.

Experimental evidence on animals shows that no less than seven-eighths of the pancreas has to be removed before diabetes develops. Presumably we can expect that about seven-eighths of the pancreas has to be destroyed by malignant disease before diabetes becomes a symptom. However, it has been demonstrated by several observers that the islets show a peculiar immunity to the onslaught of the invading carcinoma and, in fact, hyperplasia often results, so that it is common to find sections showing an alveolar or acinoid infiltration with hypertrophy of the islets. This appearance has led some observers to describe a third form of pancreatic carcinoma—one beginning in the islets of Langehans.

To assume that diabetes in this case was due to the destruction of islets by carcinoma one has to ignore the evidence of malignant disease, often having the opposite effect, besides presuming that malignant disease was well advanced a year ago, when the diabetes began, and ten months before it gave rise to more obvious and likely symptoms. Jaundice, a cardinal symptom, had never been present. Choyce and Bland Sutton say that the disease may progress slowly and give rise to little pain at first, but Ewing considers it painful and rapidly fatal. On general grounds it is difficult to believe that a visceral carcinoma of the extent that this must have been a year ago could remain symptomless for so long.

The theory of both carcinoma and diabetes following on a chronic pancreatitis would appear on the evidence to be the most feasible. However, a microscopical examination of the pancreas has failed to show any indications of chronic inflammation, though normal tissue was seen. This theory must therefore be set aside.

The third theory has the objection of involving two pathologies. Still, it is perhaps that which clashes least with the facts of the case. The patient had a primary diabetes and, some months later, he was unfortunate enough to develop a cancer as well. It was purely a chance happening that the tissue chosen was the pancreas, which contributes under 2 per cent. of the body carcinomata.

An interesting fact is that neither jaundice, ascites nor digestive disturbances ever formed part of the picture. The growth, extensive as it was, had involved neither the bile duct nor the portal vein. Another anomaly was the very slight evidence of pancreatic deficiency. Loewi's test, which is supposed to be reliable, gave a negative result, the diastatic index was not raised as one would expect, and there was no evidence of trypsinogen or diastase, though there was of lipase, deficiency.

I wish to thank Dr. Marshall for his permission to publish this case and for reviewing the article.

S. C. LEWSEN.

Bibliography

Ewing, J., *Neoplastic Diseases*, pp. 702–706.

Choyce, C. C., *A System of Surgery*, Vol. ii, p. 812.

Bland Sutton, *Tumours Innocent and Malignant*, p. 407.

Then and Now.

An address given by Mr. M. F. Hopson at the opening of the Medical School Winter Session.

MR. TREASURER AND GENTLEMEN,—There is no limit to the kindness of Guy's men to an old colleague. Seven months ago I spoke, as I thought, for the last time in this theatre. Now, after so brief an interval, I am back again, honoured by an invitation to present these medals and prizes and give an address.

Until comparatively recently it was customary for the prize distribution to take place in July and an Inaugural Address was given by the Honorary President at the opening meeting of the Physical Society.

With never-ceasing gratitude I recall more than one such address given in my student days by Sir Samuel Wilks, that grand old Guy's man whose memory will never fade. I cannot but regret the accident that befell his bust, which used to stand in the entrance hall of these buildings, and I trust it may be possible before long to replace it. It is true that we still possess a relief in bronze commemorating his association with, and services to, the Hospital and School, but even that has been removed into the shades.

In casting my memory back to those old days of nearly 40 years ago, one naturally thinks of the changes which have taken place here in both Hospital and Schools, changes induced by the advances that have been made in the science and practice of the profession of medicine.

Standing on the steps of the Colonnade, and looking down the road which borders what remains of the Park, there used to be at the end large iron gates opening into Newcomen Street, with a porter's lodge attached. At the bottom, on the left adjoining the Dispensary, was the Medical School Office. Sir Cooper Perry was then Dean, having just taken over from Sir Frederick Taylor. Mr. C. H. Wells was the Chief Clerk and Mr. Croucher was the Junior.

On the right hand side, near the gates and level with the road, was a block of low buildings which housed the Museum, Anatomical Theatre and Dissecting Room, with one or two small laboratories above. All that now remains is the "Babies' Ward" and the V.D. Department.

The Library occupied the corner of the quadrangle adjacent to the Superintendents' Office, and behind it were the old Chemical Theatre and Laboratory; this spot is now occupied mainly by the Bacteriological Department.

On the right, near the steps, stood an isolated building, "Old Clinical," housing two wards, Miriam and John. Its isolation was due, I understand, to the fact that it originally accommodated lunatics. At the end of this building Sir Thomas Stevenson had his private laboratory. Further along stood the old Fives Court, and it was at the back of this Fives Court that the original Conservation Room was erected. A little lean-to apartment, equipped with 12 wooden chairs.

Dental students can read all about the remarkable growth of their School in Mr. Pearce's article in the Bicentenary number of the GAZETTE.

The College was not built, and not a stone of this large block of buildings in which I am now speaking, or the Nurses' Home and Shepherd's House, with the Actinotherapeutic and Massage Departments, had been laid, neither did we possess an X-Ray Department.

There were no Professors of Anatomy, Physiology, Chemistry, Bacteriology or Pathology. With the exception of Chemistry, all these subjects were taught by one or other of the physicians or surgeons. Mr. Davies-Colley and Mr. Clement Lucas lectured on anatomy, and Mr. Golding-Bird, then an assistant surgeon, on physiology. Bacteriology was in its infancy, and Dr. Washbourne was our original teacher. Sir Thomas Stevenson and Mr. Groves had charge of the Chemical Laboratories. Professor Reinold lectured on physics and Mr. Beddard and Mr. Campbell on biology.

The dental students will be interested to know that we had one Dental Surgeon, Mr. Newland-Pedley, who attended on two afternoons a week.

The active medical and surgical staff in 1889, the year of which I am speaking, numbered, with Registrars, 27 members. The only special departments were Obstetrical, Ophthalmic, Aural and Dental. There was one anæsthetist, Mr. Tom Bird, who, despite a recent serious accident, is, I am happy to say, still with us.

The special departments served by members of the active staff now number 17.

All these developments show the advances that have been made and the tendency which exists towards specialisation in medical practice. They also demonstrate the progressive spirit which prevails here at Guy's.

Robert Louis Stevenson said: "There are two just reasons for the choice of any way in life. The first is inbred taste in the chooser, the second some high utility in the industry selected."

With regard to the latter there is no doubt as to the high utility of our profession, but success

in it depends very largely upon the former. Unless a man really loves his work his labours will bring him no real reward.

You, gentlemen, have made a choice of the utmost importance, and I tell you frankly you have chosen a hard way in life. It is a single-handed job for you all your time. It is not like many businesses in which, as you get older, you can ease up and direct others what to do whilst perhaps your income increases by their labour. You will be carrying on.

It may be that some of you are finding your preliminary years of training hard, and yet the importance of this preliminary work cannot be over-estimated—much of your future depends upon it.

Unless you know what the body and its organs are like in health, and how their functions are normally carried on, you cannot possibly know how to treat them when diseased or injured. Such knowledge includes not merely normal anatomy, but physiology, including chemistry, both inorganic and that which is now called bio-chemistry.

This last science has made enormous strides in recent years, and I am proud to think that some of those who had contributed most to its advancement—men like the late Professor Starling, Sir Frederick Gowland Hopkins and Professor John Beresford Leathes—were my contemporaries here.

I think the first head and neck I ever dissected I shared with Gowland Hopkins.

I might remark incidentally that " parts " were less scarce in those days. You had one side to yourself, and when dissecting your first part attention was paid to muscles only, vessels and nerves were disregarded. My original demonstrators were John Poland, L. A. Dunn and Dr. Washbourne.

May I, in passing, pay a tribute to Hancock, whom we shall all miss very much. I remember when he came here as successor to Stockwell, and regard him as typical of the very best laboratory assistant with whom one could wish to be associated.

I noticed last week that Sir Berkeley Moynihan, speaking at King's College, condoled with professors and teachers of anatomy on " being compelled day after day, year after year, to restrict one's teaching to the elementary parts of a finite subject " on the ground that it " insidiously developed an intellectual complacency and a feeling that one was master of one's subject." In the presence of the Dean, I should perhaps add that Sir Berkeley was pleading for anatomical research and along the lines of functional activities and purposes as an essential factor in the training of a surgeon.

Then comes your clinical period—your future life's work. In this your " motto " might well be: Observe, compare, reflect, then act—and I will add, record.

It is true that in certain emergencies action has to be decided and undertaken very speedily, but I am emphasising the wisdom of careful and routine examination. Let it be methodical. Even in the practice of my own limited speciality, it is surprising to find how easy it is to miss or overlook something of importance when an examination is conducted in an order differing from that in which it is usually undertaken. Method, patience and pertinacity of purpose are worth more than twice their weight of mere cleverness.

The recording of cases during your clerkships in the wards should be the commencement of a habit which will stand you in good service in private practice. In a busy general practice it may add to your labours, but it can be simplified by a card index system. The addition of an occasional personal note is of value. Your patients will be gratified if you remind them of something they told you or of some family matter that happened a year or so before.

It is in the wards and in the out-patient department that the real test of a man's suitability for the profession of his choice becomes manifest. There is another side to the practice of medicine apart from knowledge of disease and skill in diagnosis and in treatment, and that is tact and consideration of the feelings of those under your care. These are factors which contribute to success. It has been said, and I subscribe to it, that one of the most exhausting things in one's work is being civil and polite all day long to people you would like to kick—in other words, adapting yourself to the idiosyncrasies of your patients.

Discipline in this matter begins during your student days. A man of short temper, one lacking in patience and self-control, will never make a successful practitioner. Gentleness and sympathy are needed; they cost little and count for much. These qualities should be extended to out-patients and in-patients here as well as to private patients. The reputation of the Hospital suffers when they are lacking.

I alluded just now to the remarkable extensions which have taken place in the establishment of special departments. I would urge you to make use of them. It is not possible for everyone to do dresserships in them all, but do what you can, and visit them when you have the opportunity. It may be that you may be attracted by the work in one or the other so much as to lead you, after you have qualified, to choose it for your future life's work.

The largest in the Hospital is the Dental Department. I regret that it is neglected by the majority of medical students. I know that for the M.B. course a man has to receive instruction in dental surgery, but in these days, when oral sepsis is regarded as one of the commonest causes, or a contributory factor in the causation, of many forms of general disease, it should be possible for all our medical students to be made familiar with the conditions of oral sepsis and their diagnosis, both clinically and radiographically.

Many of you—most of you possibly—will become general practitioners, some of you will engage in practice in remote places, at home and abroad, in regions where you will not be able to secure the expert help of half-a-dozen specialists to determine for you the presence of "this" or the absence of "that." You will be on your own, hence the advisability of concentration on clinical evidence and methods.

Remember that your student days do not end with your course here. That which you are doing now is but a preliminary course to that which should continue throughout your life.

Gladstone, who, as our Senior Governor, opened the College Buildings, said he had always been a learner, and was a learner still. Remember that "knowledge is proud that he has learned so much, wisdom is humble that he knows no more." It is given to few to add to the store of knowledge, but the future of medicine, in all its branches, lies in the hands of those who are able to carry the interpretation of disease a step further than their predecessors.

If you will read the *Biographical History of Guy's*, if you will dip into the 76 volumes of the *Guy's Reports*, or read the "Bright Centenary Number" just published—and I should like to congratulate Dr. Hurst on the last—you will realise what has been done by workers here during the last two hundred years, and to-day we are mourning the loss of one who has made the supreme sacrifice in the cause of medical research and of humanity. During the few years Professor Stokes had worked here he had become one of us. His example and brilliant achievements will not be lost—*Vive ut semper Vivas.*

Finally, may I address a few words of welcome to the new men who are present. Guy's Hospital and its Schools constitute a great and old Institution of whose reputation we are justly proud—I would go further and say jealously proud. You will find that we play hard and work hard. If you go over to the College and look at the photographic groups of the various athletic teams and read the names inscribed thereon you will see that sport and learning are not incompatible.

There is a spirit in the old place of which you may be at first unconscious, but living in its atmosphere you will gradually absorb it, until at last you will become saturated with it, and, if you are made of the right stuff, it will never leave you. It will serve you throughout your whole life.

When you are in a tight place, and perhaps hesitating as to what you should do, you will say to yourself, "What should a Guy's man do in these circumstances?" and you will play the game and take the straight course.

The day may come when you may be able to say of Guy's as Wilks did in his old age in lines he addressed to the GAZETTE:—

"O, happy thought, to feel one's not alone,
But joined in heart by those in learning's quest.
O, happier thought, to know I have my throne
In hearts I loved and where my memories rest."

The Return from Mecca.

IN the early hours of August 1st we came in sight of Jeddah. As we neared the land coral reefs abounded everywhere. The pilot came off and took the *N*—— to within 3 miles of the shore, and there left us to swelter. Jeddah itself, though some miles off, seemed very close in the clear air, and shone a most unnatural white against the desert background, not unlike some model cardboard village set up for the cinema. Strange to think that 90 miles behind lay Mecca, where, during the last few months, hundreds of thousands had collected from different lands to feast and pray. Not for nothing though would they achieve Paradise. Every halfpenny a lifetime of saving had been able to scrape together would be gone. How they might return could scarcely be expected to interest the Meccans, nor yet the Arab brokers who deal in tickets and yearly wax the richer.

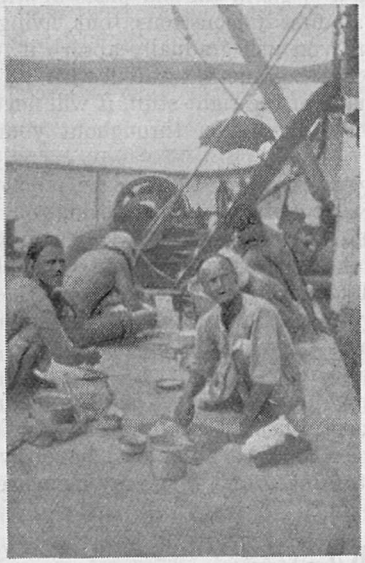
The season now completely finished, all but a few pilgrims had returned. Those who were wise had left directly after the Ramedan, some months before, while they yet had money. Those who still remained would be fleeced of everything they possessed.

The 1,275 unfortunates who now were swarming into the dhows and threading in and out the coral reefs towards us, these were the very dregs. Many even had been in Jeddah since the year before, but all would be in a sorry state. But was it

otherwise? All that had been said about their condition was true. Many were carried on board by negro slaves a mere bag of bones.

It was our duty, as medical officers, to watch the gangways and subject each pilgrim to a close examination. Smallpox, cholera, plague, venereal disease, all these the instructions found it essential to exclude. In actual fact, the most one could do was to examine a bare arm. Five cases of smallpox were in this way excluded and sent back with their families. Penniless, they could expect but scant fare in Jeddah during the next year.

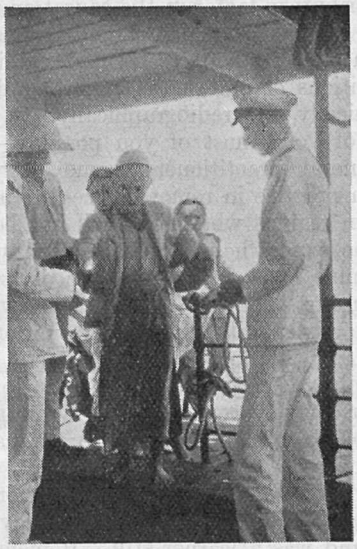
Throughout the whole of that sweltering day the dhows brought off their sweltering loads, and the pilgrims streamed up the gangways. When the last dhow had come off and emptied its crowd and their varied belongings the *N*——, with its holds and all its deck surface crammed, moved



Pilgrims on deck.

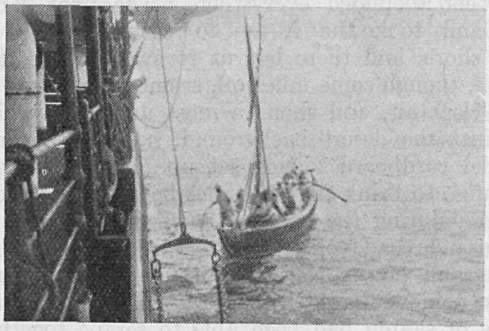
off down the Red Sea. In two days we should be free of the sweltering damp heat, but then the south-west monsoon would be upon us.

The next 18 days can scarcely be said to have been enjoyable. The odour from our thousand "Hadjis" increased daily. Much of their time they spent in chopping up wooden logs, which were their daily allowance of firewood, while the smoke from a thousand stoves filled the air. Twice daily during our round of inspection we picked our way through the holds, peering into every corner with an electric torch. Such a round would frequently take two hours. Dr. Moonshi, a native doctor and J.P. of Singapore, who was aboard with his family, accompanied us at first and taught us simple Malay phrases. But these were strange people. "Ada beik, Tida sakit," "all well, no one ill," we inquired of each group. "Bagous," excellent, was the invariable reply. Anyone who seemed ill they said "Tidore," asleep, and we left them. After several days of



Pilgrims coming up the gangway. Surgeon (on left) examines arm for vesicles.

this we found things were not so very "Bagous" as they made out. On the fourth day, just before we passed Sokotra and came in for the full blast of the monsoon, one of those who for some days had been pointed out as a "sleeper" was now, they said, a little unwell. We looked into the matter. His temperature was 105°, and one lung solid. He had his crisis that night, with every other wave soaking him in salt spray. He was carried below and, as is inevitable in such an atmosphere, he died two days later. Very much the same happened with an old lady who was hidden in the darkest and most inaccessible regions of the fore hatch. We found her, two days before arriving, with pneumonia. How she lived to



Dhow full of pilgrims arrives off the gangway.

reach Singapore I shall never understand, unless the alcohol which we poured down her in considerable quantities had something to do with it. The Malays never touch alcohol. Indeed, had they known the nature of our medicine they would have refused it outright. It should thus be more potent than with us less abstemious races.

Ninety per cent. of those requiring treatment had dysentery or some form of diarrhœa. Quite a number had extensive whitlows, so extensive in many cases that it was incredible that extension up the limb had not occurred. In three cases, at the time they came for treatment, the whole of the bone of the terminal phalanx was dead, and several sinuses poured pus from the enormous swollen mass. These people seemed quite fit and well and were most apologetic for troubling us about trivial matters.

Otherwise, a case or two of beri-beri and several of malaria—these were all those requiring special treatment. Under the circumstances it was impossible to go into the question of obscure aches and pains, and in these cases the black draught bottle came in handy.

After about a fortnight of the Indian Ocean, the meat had passed the border line, and the whole ship was complaining of its stomach. As we had no refrigerator, but only an ice box, this is not to be wondered at. All the rest of our eatables were from tins. We soon had run out of fruit. With this régime the general standard of cheerfulness sank rapidly until half way across the Ocean, and with yet seven days to go everyone prayed fervently for Singapore, and each day gone was an immense relief.

Eighteen of the pilgrims achieved everlasting Paradise and went over the side, feet to Mecca, one a day. But all these were moribund when they came on—starvation, hardships and privation in almost every case. They were worn out. Yet the authorities would be little satisfied by such unmedical terms, and we were increasingly hard put to it for new causes of death. One of our best, which seemed good enough to repeat once or twice, was "post dysenteric asthenia." I suggested "myosthenia gravis," but the other M.O. vetoed the suggestion as bordering on the flippant.

A strange sight to watch the days voyager to Paradise. As he painfully heaved his last breaths, relations and other interested spectators gathered around to speculate on his immediate prospects. "Habis," finished, one would say. "Ti da" was the reply, "Satu jam lagi," another hour yet. All this without raillery. All in perfect seriousness and without irreverence. To them the matter was not of such importance as to call for any demonstration of feeling. The man had lived to achieve Paradise, and now he was going there. Many considered him fortunate thus to die on the return from Mecca. A few minutes later, when the chief of the family came along to tell you "mati," dead, they would wash the body and clothe it in the winding sheet, which all compulsorily carry. One last piece of ritual was yet to be accomplished, without which still might his chance of Paradise be jeopardised. As the platform was tilted and the body slipped towards the waters the feet must cleave the surface towards Mecca. I have heard a despairing sigh from the thousand watchers as some lurch or untimely roll has caused the platform to swing round and that plunge be made while the feet were not pointing rightly.

These bundles of human bones rarely got far before some shark scents them out. I wonder what he thinks of the firebar!

As some compensation for these 18 we had two births. One we were told of five days later. The other, which we knew of at the time, was all over in half a minute. A quarter of an hour later mother picked up her baby and walked below. Needless to say, we were allowed no part in the performance. These were great happenings. Two extra special babies born on the pilgrimage.

At last we were but two days from Singapore. One final inspection had to be made to exclude any infectious disorder. All our hadgis were "chased" forward. Those then who remained aft unable to move were inspected, and more, who had stoutly proclaimed themselves "bagous," were found in various degrees of decomposition. Then the whole herd filed past and each was submitted to a piercing inspection. All the young women celebrated the occasion by covering themselves completely, and made things still more difficult by their strong objections to every effort at inspection.

With luck one could grab an arm and see that it had no vesicles. One young damosel, whose veil I lifted, let off a piercing shriek and dashed off at speed.

In the early morning of the 18th we drew slowly in to the wharf at Singapore. Swarms of relations, whose cleanly silken attire and healthy looks contrasted sadly with the ragged garb and sunken cheeks of our pilgrims, were ranged along the quay side. The end of their pilgrimage had come. Wherever now they went they would command respect, and the tale of their adventures would lose little by the years. And then afterwards Paradise awaits them. Whatever their feelings at arriving home, ours at least were unmixed. A half hour later the last of them had thrown his goods over the side and scrambled down the gangway.

C. F. B.

Reforms in Medical Practice and Training.

SEVERAL points of interest to the medical profession and to those who are in training for it were raised at the Imperial Social Hygiene Congress, which met under the auspices of the British Social Hygiene Council at the Caxton Hall, Westminster, from October 3rd–7th.

The most immediately significant point was that made by Mr. E. B. Turner, who pointed out that when the medical course of study was recast by the General Medical Council the problem of venereal disease had been considered, and that it had now been decided that all students must attend a venereal disease clinic before sitting for their final examination. He had, he said, been through the examination papers of all the examining bodies for one year at that time and, throughout that period, only five questions had been set on venereal diseases, three of which were practically the same—on general paralysis of the insane. As the result of the new regulations such questions would probably become more frequent.

The same point was emphasised in connection with conditions in India. Dr. David Lees, speaking of that country, said that medical students wishing to qualify should be compelled to show some knowledge of venereal diseases before graduation, and argued that in this way charlatans could be eliminated. Major Hassan Suhrawardy also demanded the training of medical students in venereal diseases and advocated the establishment of post-graduate medical training in the subject.

A second point of considerable importance was raised by Sir Frederick Lugard in his presidential address on "Colonies, Protectorates and Mandated Territories." He appealed to the Congress to consider the shortage of doctors in the Mandated Territories in Africa. His Majesty's Government, he said, had laid down the principle that the interests of the African natives must be paramount, but now that the funds were available it was a question whether the staff was available, and one constantly heard of the difficulty of keeping even the present staff up to the authorised strength. Sir Frederick Lugard pleaded for a steady supply of Africans trained in four categories—hospital attendants, sanitary inspectors and dispensers, subordinate medical officers and fully qualified medical officers.

Mr. E. J. R. Hussey raised a cognate point in the discussion on education. He insisted that science should have a very prominent place in Africa, and that the African's genius for imitation should be utilised. In Uganda dispensaries were being spread all over the country and a proper medical school was being established, and they hoped in 50 or 100 years' time to turn out doctors who would be as efficient as the British.

Lastly, the whole question of compulsory notification and compulsory treatment of venereal diseases was brought forward, Dr. T. F. Dewar bringing forward evidence that Scotland was in favour of increased legislative powers; some similar evidence being brought forward from England. Dr. Forgan, of Glasgow, said that in connection with venereal diseases general practitioners had been accused of slipshod methods and ignorance. That statement might perhaps not be fair to the general practitioner, but if cases were to be notified he would like to see the treatment of venereal diseases restricted to medical men who were highly qualified in the subject. He advised the putting of the question direct to the general practitioners themselves. He had himself made a postal inquiry, and the replies received showed that 5 were satisfied with the present system, that 4 objected to compulsory notification and treatment, that 4 refused the idea of passing venereal disease patients on to other practitioners, that 91 approved of modified notification and compulsory treatment and that 39 wished to serve on a special panel for treating such cases.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

"The Adventures of Lady Ursula."

AN evening performance of *The Adventures of Lady Ursula*, by Anthony Hope, produced under the direction of Mr. Reginald Denham, in aid of Guy's Hospital, will be held at the Scala Theatre, Charlotte Street, W.1, on Monday, November 28th, 1927, at 8.15 p.m.

Committee—Her Grace the Duchess of Bedford, Lady Bennett, Hon. Mrs. W. H. Brooke, Hon. Margaret Best, Lady Bonsor, Lady Donaldson, Mrs. Tennyson D'Eyncourt, Mrs. Eason, Lady Fripp, Lady Farquhar, Lady Hale-White, Mrs. Hurst, Lady Lane, Lady Moir, Hon. Mrs. Molyneux, Miss McManus (Matron), Mrs. Rowlands, Mrs. Steward, The Rt. Rev. The Lord Bishop of Salisbury, The Lord and Lady Wenlock, Hon. Mrs. F. Whitbread, L. S. Williams, Esq. (President of the Residents)

Hon. Organising Secretaries—Mrs. W. H. Ogilvie, T. D. T. Brocklehurst, Esq.

The caste will include (subject to possible alteration: Viscountess Bridport, Miss Ethel Donaldson, Mrs. Randall, Mr. C. C. Copperthwaite, Colonel R. B. Airey, Captain Caldbeck, Mr. W. Cotter, Mr. Ross Hutchinson, Captain Oakshott, Mr. James Verity, Captain Curtis, Mr. Forsyth Forrest, Mr. Pagden Child.

Prices of admission (including tax): Orchestra Stalls, 21*s.* (first rows), 12*s.* and 10*s.* 6*d.*; Dress Circle 12*s.*, 10*s.* 6*d.*, 7*s.* 6*d.* and 5*s.* 9*d*; Stalls, 7*s.* 6*d.* and 5*s.* 9*d.*; Circle, 3*s.* 6*d.*; Upper Circle, 1*s.* 9*d.* Tickets may be obtained from any of the Committee, the Medical School Office, or the Appeal Office, Guy's Hospital, S.E.1.

Wanted—

£100,000 for the extinction of debt; £15,000 additional Annual Income from subscriptions to enable the Hospital to pay its way.

10 *Reasons Why You Should Give*—

Because Guy's Hospital has served the sick and suffering for over Two Hundred Years.

Because Guy's Hospital helps you directly and indirectly in your own health and sickness. It discovers new means for the prevention and cure of disease. It trains your doctor and it trains your nurse.

Because it ministers to the needs of teeming thousands, mostly very necessitous, inhabiting one of the poorest districts in the Metropolis surrounding the docks and riverside.

Because it is the centre to which the sick and suffering of the district naturally turn, certain of ready sympathy and help in any emergency.

Because its means are inadequate, and to maintain the work of the Hospital in its full efficiency an augmented income is a vital necessity.

Because Guy's Hospital annually treats 10,000 in-patients in its 642 beds—over 50,000 casualties and half-a-million out-patient attendances.

Because *Guy's is not a rich Hospital*, its only assured income, that from endowments, is but one-third of the necessary annual cost of maintenance. Towards the annual expenditure of over £170,000 the present subscription list amounts to only £5,000 per annum.

Because each patient costs the Hospital £12, totalling £120,000 in the year. The patients cannot possibly pay all this themselves, though they contribute over £22,000 a year in voluntary gifts.

Because you will help the subscription list to equal, if not surpass, the patients' own donations.

Because any contributions you may be good enough to send will be gratefully acknowledged by

THE TREASURER,

Guy's Hospital, S.E.1.

Reviews.

Ten Little Nigger Boys. By STANLEY COCK. Published by Nelson. *Price* 2*s.* 6*d.*

A STRANGE tale to be reviewed amongst the successes of mercurochrome or the difficulties of Goetz puncture. But every practitioner must indulge himself with a nursery, else he in part fails to grasp the difficulties of childish psychology—an urgent problem. And a nursery needs picture books and toys to foster youthful illusions.

All Guy's men who have been externs subsequent to 1904 will remember Stanley Cock as the playful creator of black babies. His mural picture "What Will Master Say?" is famous to Guy's posterity. Mr. Stanley Cook has in this book enlarged upon his original motif and illustrated the mythological history of *Ten Little Nigger Boys*. The story and drawings preserve all that conservative respect for the traditions of the nursery that mothers demand.

When you buy this book for your child give it with some casual remark, "This was all done by a Guy's man." Your child, knowing the best of your past, will look up at you with great round eyes of wonderment—"Ooh, Daddy, oo's a Duy's man too!" You deceitfully take a share in the glory and record another conquest to stand you in good stead when your child matures and looks upon you as an "old fashioned dear."

The Principles of Practical Bacteriology. By J. H. JOHNSTON and R. H. SIMPSON. 1st Edition. Published by J. & A. Churchill. *Price 5s.*

PUBLIC Health workers, counsels in medico-legal cases, commercial travellers in antiseptics and tinned fruits, prospective laboratory assistants, take this book to your libraries. For 5s. and one evening's concentration you will be able to discuss nutrient agar, hyphomyectis, metachromatic granules and platinum loops with the more laboriously enlightened.

This book has been written for those who, from necessity or interest, wish to acquire rapidly a general working knowledge of bacteriology, and subsequently deal in more detail with the particular branch that effects their science or trade.

The "Appearance and General Properties of Bacteria" is followed by "Methods of Sterilisation." Cultivation of bacteria on the commoner media and the investigation of cultures take the next three chapters, including some pages on the isolation and enumeration of bacteria in water, sewage, milk, etc.

No attempt is made to describe individual organisms. The important differences in morphology and cultural characteristics between various groups are outlined, and then suggestions given for more detailed examination.

The information is orthodox and ample to serve the author's object.

Rugby Football Annual. Published by Sporting Handbooks, Ltd. *Price 1s.*

THIS little book, which the Rugby enthusiast should find quite interesting, entirely lives up to its title—an exhaustive book of reference for followers of the game. However, the compilers have failed to settle that question which of late has been causing so much discussion in our daily papers—"Which is the oldest Rugby Club in England?" In their chapter, Rugby Notes and Queries, they do state that Blackheath was founded in 1862, but we believe that one Club at least was playing at that time.

The number of pages given to details of Rugby in our Public Schools seems to be out of all proportion, while it is with difficulty that we find any reference to the play of the Rugby Clubs of Great Britain. Of course, we realise the difficulty of selecting those to which to refer, but we feel that followers of the game would take quite as much interest in the doings of their local clubs as of their old School. The list of fixtures attached to this handbook is a useful accessory, since it will enable readers to study their programmes some time in advance of local announcements.

Materia Medica and Therapeutics. By J. M. BRUCE and W. J. DILLING. 13th Edition; Revised. Published by Cassell & Co. 686 pages. *Price 10s. 6d.*

IT is strange that this manual, which has reached thirteen editions, should have escaped the writer's notice hitherto, for in many ways it is a book which would have given him much help when working for the many examinations which interrupt medical training.

It is divided into sections. Thus pharmacy deals with dispensing, dosage, prescription writing, compatibility, and other topics.

The pharmacology section discusses the action of drugs, and the section on therapeutics the treatment of various disorders under their appropriate systems. These sections have observations on diet, vaccines, electro-therapeutics, massage, etc, and also notes on the actions of recently introduced drugs, like Bayer 205, Sanocrysin, Bismuth injections, carbon tetrachloride and others.

There are several minor points that call for criticism, mainly in the direction of extending various sections. Thus the paragraphs on incompatibility and idiocyncrasy are, in the writer's opinion, inadequate; nor are the subjects of acidosis and alkalosis fully treated; the exact site of action of drugs also deserves fuller consideration.

The therapeutic section tends to be somewhat scrappy in places. From the point of view of examinations, full details of the treatment of syphilis, infantile diarrhœa, and some other diseases would have been very useful.

While this volume cannot be called short, the pages are small, but there are four hundred and fifty words on each, and 686 pages in all. The ground covered is extensive, and we think that the discriminating reader would find much of it of the greatest assistance in reading for pharmacology and medicine examinations.

For the qualified man it also might be useful; the arrangement and treatment of the therapeutic section are such as to offer sug-

gestions for treatment, and the physician who desires to change the medicine of an importunate patient is sure to find here a drug to suit all tastes.

A Book on Diseases of the Nervous System (Organic). By R. BURNETT HAM, M.D., D.P.H. Published by Ash & Co., Ltd. 1st Edition. Price 2s.

TEXT-BOOK descriptions of Nervous Disorders have always to be taken with a grain of salt, so variable are many of the symptoms and signs which may occur in patients suffering from the same disease. It is for this reason that, of all the diseases peculiar to the human being, that relating to the nervous system in particular cannot be learned by rote. Actual experience of cases and the "recording" of the actual clinical findings found in each particular disease is the only way in which a clear and useful knowledge can be obtained.

The book here reviewed is intended for use in the wards. It comprises a combination of a text-book and a book for the recording of clinical cases. After a brief foreword on the physiology of the nervous system, it is divided up into sections dealing with all the commoner varieties of nervous disorders. For example, the first disease described is that of Tabes Dorsalis. This is divided up into two parts—the early stage and the later stage of the disease. One page is devoted to a brief description of the main symptoms which may be found in the early stage of tabes. On the reverse page is a diagram to illustrate pictorially these symptoms. Then follows space enough for recording the clinical findings obtained in three actual cases seen by the student. By comparing these he may obtain some idea of the chief symptoms and signs of the disease under consideration. In a like manner, such diseases as Disseminated Sclerosis, Progressive Musculative Atrophy and Cerebral Tumour—to quote a few—are described.

It fulfils the purpose for which it is intended and is well recommended.

The Nature of Disease. By J. E. R. MCDONAGH, F.R.C.S. Part II. Published by Wm. Heinemann. *Price* 21*s.*

IN these days the average student of medicine, after spending at least three years with the preliminary sciences, proceeds to a further similar period of contact with clinical material. It seems incredible therefore that a century of so-called scientific medicine should be unable to offer him some fundamental conception of the nature of disease before he sets out on his life work. Strangely enough, the specialised development of physical and chemical science has at present only reached that stage where a feeble glimmer of light may be thrown on those basic yet abnormal reactions of the animal organism that are the peculiar concern of the doctor. There is, however, of late a distinct stir in the camp. The leaders in the two main schools of medical thought are moving steadily away from the old clinical pigeon holes. The experimentalist is hard at work with the tissue fluids and with the cell membranes, while the clinician seeks pious consolation in a return to the diathesis in a modified form. In both schools there is evident the same valuable desire to dig deeper into the nature of disease.

The author of the volume under consideration steps somewhat boldly where many an experimentalist angel would fear to tread. For him the surface state of the protein particles in the plasma is the fundamental thing in disease. To be brief, the contention is that in good health there is a normal dispersion of the particles. Chronic and acute infections are associated with dehydrated states of these protein elements in graduated degree, while diseases of the toxic group—diabetes mellitus, uræmia, etc.—are the result of partially hydrated states and complete hydration, with malignant disease. Therapeutic agents, and procedures of proved value in the respective maladies, are examined and their several actions explained with reference to their influence on the surface states of the plasma components. This thesis is energetically supported by a somewhat unwieldy mass of experimental evidence. Blood analysis, refractive states of sera, suspension stability and observations with the interferometer and ultra microscope loom large in the examination of each case. Portions of the book are in consequence somewhat indigestible, and we found our attention wandering to the general discussion of evidence and conclusion.

There is a good deal in the author's statement that the physical chemist has quite unnecessarily worshipped the colloid state and hallowed it until the average man of science has come to regard it as some incarnate condition to be mentioned only with awe and treated with deferent ignorance. At the same time, we fear lest anyone with a quite understandable phobia of structural formulas should chance to open this book at the section on chemotherapy. The electronic diagrams so liberally scattered therein would provide more than a shock to a sensitive system. The shortcomings of the usually accepted version of the Wassermann reaction have always been a thorn in the side of the immunologist. We are not sure

that the author's so-called simplification come up to our expectations. We found it difficult to follow, and even more involved than the explanation usually given.

Our considered judgment is that this highly interesting thesis is somewhat premature, finding, as it does, an insecure basis on a restricted field of evidence.

While price and subject matter do not suit this book to the student who has yet to face his final, we feel sure that a perusal should be of great value to all those who are interested in the present trend of experimental medicine.

Diary of Appointments for 1928 *with Address Book.* Published by The Dental Manufacturing Co., Ltd. *Price* 6*s.* 6*d.*; *Postage* 6*d.*

EVERY dental practitioner has need of an appointment book, and for this purpose this book is very adequate. Of convenient size, it combines the uses of an appointment and an address book, a special space at the back holding a separate indexed address book, which can be transferred to the new diary at the end of the year.

Both the binding and the paper are of such strength as to withstand the constant wear of a busy practice. Each page takes appointments for quarter, half or three-quarter hours for three days. It is extremely good value for the price, which is very moderate.

Diagnosis and Treatment of Venereal Diseases. By DAVID LEES, D.S.O., M.A., M.B., F.R.C.S. 1927. Published by E. & S. Livingstone. *Price* 15*s.*

THIS handy volume of some 600 pages, in which one-half is devoted to syphilis and one-half to gonorrhœa, deals adequately with the modern diagnostic methods and treatment of venereal diseases.

Excellent descriptions of the various stages of acquired and congenital syphilis are supported by numerous illustrations of the characteristic lesions, which will prove of great value to students.

The various pathological tests are described and their value considered.

An extensive section on the treatment of syphilis provides detailed courses for the various stages with arsenical preparations and the heavy metals.

A separate chapter deals with the treatment of neuro-syphilis, in which the methods and value of tryparsamide and malarial therapy are discussed.

The early and late toxic effects of the organic arsenical compounds are clearly described and the treatment indicated.

The second half of the book deals in an up-to-date and thorough manner with gonorrhœa and its treatment in both sexes. Valvo-vaginitis in children is dealt with rather briefly; no mention is made of the involvement of the rectum—a complication which is by no means uncommon and which may frequently be responsible for relapses.

Modern urethroscopes are described and their use indicated in diagnosis and treatment.

An excellent feature of this volume is the most useful and comprehensive pharmacopœa of compounds used in the treatment of venereal diseases, which should be greatly appreciated.

This work should prove popular and may be recommended to practitioners and students.

The Operations of Surgery. By R. P. ROWLANDS and P. TURNER. 7th Edition. 2 Vols. Published by J. & A. Churchill. *Price* £3 10*s.*

IN this, its 7th edition, *The Operations of Surgery* requires no introduction to the surgical student, least of all to those of the hospital to which it is dedicated. The authors have happily preserved the spirit of the original work of Jacobson, and have been true to the main objects with which the book was written.

Firstly, the actual operations are described with such a wealth of practical detail that they cannot fail "to be of *real* assistance to young surgeons taking up responsible positions and to candidates for higher examinations."

Secondly, the book supplies useful references in the various branches. The surgical student must often feel overwhelmed by the mass of literature dealing with his subject; here he will find the main outlines of his study and guidance to various papers carefully selected from innumerable sources, for the sifting of which he has neither the time nor the opportunity.

Thirdly, it aims at maintaining the advance of surgery by the introduction of new methods and new work. The authors, in truly scientific spirit, recognise that all these methods may not stand the test of time, and therefore do not claim them all as infallible.

But this book is far more than its title suggests; perhaps its greatest value lies in the wealth of clinical knowledge it contains. The diagnosis and selection of cases are matters of primary importance, and this aspect of the question is dealt with very lucidly. Here, in particular, one feels the "personal touch" which is such a feature of this work; the reviewer has found the greatest pleasure in attempting to identify his teacher through the medium of their personal expression in the various chapters.

This edition has been largely rewritten, and much that is new has been added. By the judicious use of small print the actual size of the volumes has been slightly diminished. The regional method of classification has been preserved throughout. This is particularly convenient for the general surgeon, who at any moment may be confronted with problems which fall within the realms of "special departments." The chapters dealing with the chest, cranium and plastic operations give excellent accounts of the modern advances in these branches. The section devoted to gastro-intestinal work is thoroughly revised and brought up-to-date. The book is very well illustrated, a large number of the plates being new.

The main criticism to be directed against this book is that "clinical" surgery is perhaps given undue prominence. The restless modern student is apt to tire of long detailed accounts of "set" amputations, excisions and ligatures; a good deal of valuable space is allotted to some of these procedures which hardly come within the realm of modern surgery. Are Chopart's and Lisfranc's amputations ever performed to-day?

Again, while acknowledging that the method of amputation is largely decided by the availability of tissue and orthopædic considerations, no less than six "set" methods of disarticulation at the shoulder are described. One feels that a fair percentage of these methods might at least be relegated to smaller print.

On the other hand, diathermy, a valuable modern weapon in the surgeon's armamentarium, is still confined to inconspicuous type; surely it is worthy of promotion.

Certain modern scientific discoveries which directly affect surgical practice have been dismissed with undue brevity. The description of "shock" has not kept pace with the work of Dale and Cannon, histamine being only allowed a few lines, while "splanchnic dilatation" still receives a paragraph, although the theory is no longer tenable. The use of insulin in diabetic surgery receives no mention. Surely this is a branch of therapeutics with which a surgeon must be familiar?

Finally, a sentimental criticism, but one which is justified by the "classical tone" of the work, is the omission of the name of Jacobson from the title page.

The Operations of Surgery is a valuable constituent of the surgeon's library. In its pages the reader will find help and guidance, as it offers the actual experience of the past as an incentive for work in the future. The authors have to be congratulated on the lucidity and interest which they have maintained throughout a thoroughly "readable" book.

Correspondence.

The Biennial Dinner.

DEAR SIR,—This is the last opportunity I shall have of writing to you about the Biennial Dinner, which will take place on Friday, November 4th.

I have had one disappointment during the last week in that A. H. Spicer, M.C. (1896), a Vice-Chairman for this year, finds that he cannot be present at the dinner.

R. C. Mullins (1900) has been invited to act in his place.

I have already receive over 200 acceptances, and there are still nearly three weeks to go. It looks as if there may be a record attendance this year.

During the next week-end, October 22nd–24th, the tickets for the dinner will be sent out. I shall be grateful if everyone will study the notice accompanying the ticket, and mark and return it to me *at once*.

Yours sincerely,

17, Wimpole Street, W.1. E. C. HUGHES

October 16th, 1927.

Below is a list of the Guy's men who have signified their intention to be present at the Dinner—

1874	James, Surg.-Col. W. Culver	1885	Du Boulay, H. H.	1889	Mitchell, S. E.
1875	Symonds, Sir Charters, K.B.E., C.B.		Green, A.	1890	Fawcett, J.
1879	Howell, T. A. I.	1886	Beard, F.		Stevens, T. G.
	Hale-White, Sir William, K.B.E.		Holloway, S. F.	1891	Rogers, W. G.
1880	Ashwell, H. G., O.B.E.		Drew, H. W.		Jewell, J. W. F.
	Parke, C. V.		Bett, Surg. Rear-Admiral W., C.B.		King-Brown, R.
1881	Pitt, G. Newton, O.B.E.		Hyslop, T. B.	1892	Daldy, A. M.
1884	Worthington, S.	1887	Campbell, H. J.		Floyd, S. G.
	Counsell, H. E.		Randall, P. N.		Durham, H. E.
1885	Bisshopp, F. R. B.	1888	Routh, C. F.	1893	Pendred, V.
			Black, G.		Barrow, Maj.-Gen. H. P. W., C.M.G., D.S.O., O.B.E.

1893 Little, E. Graham, M.P.
Luce, Maj.-Gen. Sir R. K.C.M.G., C.B., M.P.
1894 Munro, H. A.
Hovenden, A. C.
Hovenden, G. S.
1895 Parfitt, J. B.
Handley, W. S.
Ensor, C. A.
1896 Garland, J. O.
Busteed, J. H.
Spriggs, E. I.
Rowlands, R. P., O.B.E.
Butler, A. G.
Ormond, A. W., C.B.E.
Hills, W. E.
Poole, T. Brice
1897 East, W. Norwood
Mayston, R. W.
Fremantle, Lieut.-Col. F. E., O.B.E., M.P.
Marsh, H. R.
Cleveland, A. J., O.B.E.
Way, M.
Howard, R.
1898 Eason, H. L., C.B., C.M.G.
McGavin, L. H., C.B.E.
1899 Pearce, F. V.
1900 Goble, E. W.
Clarke, E.
Mullins, R. C.
French, H., C.B.E.
Secretan, W. B.
1901 Soper, A. W.
Roper, R. S.
Lewin, G.
1902 Griffin, E. H., D.S.O., M.C.
Odgers, P. N. B.
Jackson, F. D. S.
1903 Spriggs, N. I.
Smart, H. D., M.C.
Cooper, J. S.
Watts, Lieut.-Col. H.
Mann, H. C. C., O.B.E.
1904 Cole, P. P.
Routley, E. W.
Hurst, A. F.
Mollison, W. M., C.B.E.
1905 Miller, A. H.
Watney, H. A.
1905 Palmer, F. W. M.
Cameron, H. C.
Wells, S. M.
French, R. E.
Lowe, E. C.
Smith, E. Bellingham
Harrison, E. M.
Hamilton, G.
1906 Alcock, A.
Bankart, A. S. B.
Rowlands, R. P.
Malleson, H. C.
Stebbing, G. F.
Trethowan, W. H.
Goodhart, G. W.
Litchfield, P. C., M.C.
Palmer, A. S. M.
Hardy, G. F., M.C.
Vandermin, H. F.
1907 Laidlaw, P. P.
Aubrey, H. P.
Ripman, C. H.
Flower, N.
Carlill, H.
Carr, T. E. A.
1908 Johnson, W., M.C.
1909 Browning, S. H.
Lucey, H. C.
Drint, D. C.
Attwater, H. L.
1910 Bromley, L.
Cox, A. N.
Barber, H. W.
Kidd, W. S.
Yerbury, E. O.
1911 Elliott, E. L.
Mutch, N.
James, H. L.
Sandison, A.
Billing, E.
Cook, F.
Glendining, V.
1912 Reynell, W. R.
Fry, W. Kelsey, M.C.
George, W. S.
Redding, J. M.
Zamora, A. M.
Cole, T. P.
Hoby, H. J.
1913 Ogilvie, W. H.
1913 Eccles, G. D., M.C.
Mather, H.
Watkin, P. J., M.C.
Lane-Roberts, C. S.
Bulleid, W. A.
Tanner, W. E.
1914 Harkness, A. H.
Boswell, P. R., M.C.
Messenger, H. L., M.C.
1915 Knott, F. A.
Sells, R.
Baxter, C. W. W., M.C.
Curle, R.
Purkis, K. N., M.C.
Symonds, C. P.
Neely, W. G. S.
1916 Wacher, H. S.
1917 Woodruff, K.
Laver, C. H.
Bulleid, A.
1918 Lawrence, F.
Spencer-Payne, A. Ll.
1919 Dowling, G. B.
Payne, W. W.
1920 Gillespie, R. D.
Richardson, P. L.
O'Meara, P.
Crook, F. W.
1921 Shaw, M. E.
Shelswell, A. H.
Hodgkinson, R. J.
Douthwaite, A. H.
1922 Davies, D. S.
Stoker, G. M.
Richards, E. H.
1923 Lewin, J.
Boland, E. R.
Baylis, H. P.
1924 Westlake, H. J. W. J.
Parsons, K. O., M.C.
Millis, G. C.
1925 Worthington, C. L.
Selby, H. J.
Jago, M. E. M.
Hawkins, B. E.
1926 Arnold, N. A.
Pye-Smith, E. J.
Marshall, C. W.
Ettles, D. C. M.
Ensor, A. G.

Professor Stokes' Memorial.

DEAR SIR,—The School Council has decided to establish a permanent memorial to the late Professor Adrian Stokes. The precise form which the memorial will take cannot be determined until it is known what sum of money will ultimately be available, but there is general agreement that it should be the endowment of Medical Research in some form—possibly a Research Studentship or Fellowship, as it is known that this is the only form of memorial which would have met with his own approval.

The School Council is anxious to make the memorial a worthy tribute to the man and his work, for although he had only held the Lectureship for the short space of five years, he had, both by his work and his personality, won for himself a high place in the esteem and affection of everyone at Guy's. The inception of the Fund has already been announced publicly, and I append a list of the subscriptions which have been received up to date. Contributions to the Fund may be sent to me and will be gratefully acknowledged.

I am,

Yours faithfully,

T. B. JOHNSTON.

Dean.

	£	s.	d.
Anonymous	2	2	0
„	3	0	0
„	10	0	0
Dr. Andrew Balfour	3	3	0
Mr. and Mrs. T. A. Hamilton Barques		10	6

Miss E. Binney	1	0	0
Dr. W. S. D. Bird		7	6
Dr. E. R. Boland	5	5	0
Miss N. K. Clarke	1	1	0
Dr. J. J. Conybeare	25	0	0
Mrs. Crookshank, Miss Janet Crookshank, Mr. Barney Crookshank	5	0	0
Dr. F. Crosbie	1	1	0
Commander W. R. D. Crowther	2	2	0
Mr. and Mrs. R. Davies-Colley	25	0	0
John Fish, Esq.	1	1	0
Miss E. C. Fisher	1	0	0
Dr. R. D. Gillespie	2	2	0
Howard Guinness, Esq.	5	5	0
G. E. Guinness, Esq.	5	5	0
Miss Mary Guinness	5	0	0
R. Noel Guinness, Esq.	25	0	0
Mrs. J. M. Jellett	10	0	6
Miss M. Jellett	1	0	0
Mrs. R. Hunt	2	2	0
Dr. and Mrs. A. F. Hurst	25	0	0
W. R. H. Johnston, Esq.	1	1	0
Mrs. Rait-Kerr	15	0	0
Captain E. Rait-Kerr	12	10	0
Major R. S. Rait-Kerr	25	0	0
Dr. E. Mapother	25	0	0
Lieut.-Col. J. G. McNaught	1	0	0
Major-General Sir Robert Porter	1	1	0
Miss Sproat		5	0
Mr. and Mrs. John Stott		10	0
Major W. N. Stokes	100	0	0
W. A. M. Thompson, Esq.		10	0
Mrs. L. A. Weir	1	1	0
A Well Wisher		10	0
Total to date	£350	15	6

Sport.

Rugby.

Guy's v. Llanelly.

ON Saturday, October 8th, Llanelly were entertained at Honor Oak Park, and, after a hard struggle, Guy's proved victorious by 1 goal, 2 tries and a penalty goal (14 points) to a penalty goal (3 points).

Prior to this game we had not met our visitors since 1913, and it was a great pity that the game was marred by incidents which made the referee's task difficult, to say the least of it.

Nevertheless, it was a well-deserved victory, and the Guy's men are to be congratulated upon their fine efforts in being the first team to defeat the hitherto unbeaten fifteen from Llanelly.

Once again our forwards dominated the game from start to finish. Their marking was excellent, and with Myburgh doing his work as hooker exceedingly well, our backs were given plenty of opportunities to prove their worth.

Guy's were set to face the sun, and from the kick-off Llanelly immediately attacked, but they were penalised for feet-up and driven back to their 25. The visitor's full back fielded the ball well and with a well-directed kick found touch well into our territory. Each side was then penalised for scrum offences, and eventually Durr relieved with a good kick to touch. Guy's then set up a hot pressure on the visitor's goal line, but offside lost us what ground had been made. However, it was only for a moment. Garland secured the ball from a scrum, passed to Green who, in turn, passed to Durr, who scored a good try, which he failed to convert.

Llanelly then pressed heavily, and Guy's were penalised in their own 25. Jenkins was entrusted with the kick, and although wide out kicked a beautiful goal.

Guy's then took up the attack and the visitors were penalised for offside. Robinson and Ryan followed up well and compelled the visitor's full back to kick into touch without gaining any ground. A scrum was formed and Garland, ever ready to seize the slightest opportunity, secured the ball and after handing off two opponents raced through the defence to score behind the posts, Durr easily adding the extra points.

Then followed a period of midfield play in which the brothers Spence showed up well with some good kicks to touch. Guy's again pressed, but a forward pass spoilt a promising movement, but soon after the visitors were penalised for feet up, and Durr, with a fine kick from midfield, landed a perfect penalty goal.

Thus, half time arrived with Guy's leading by 11 points to 3.

Immediately following the kick-off Guy's were penalised, and Jenkins tried a shot at goal, but missed badly. Guy's then attacked, but just when a score seemed certain a forward pass delayed further progress. Jenkins relieved with a good punt down the field, and with their wing forward following up and Lewis missing the ball, things looked dangerous for Guy's, but a forward pass spoilt the movement.

Our visitors initiated another attack along their three-quarter line, but over anxiety resulted in a knock-on, and again their progress was checked. Then followed a good movement between the Guy's backs. Green passed to Spencer, who ran well. When challenged he passed to Lewis who, in turn, passed to Durr; the latter was practically over the line when he was splendidly tackled and brought down. Guy's were penalised for offside twice in a short time, but each attempt to kick a goal failed.

Garland was then conspicuous in some brilliant tackling. Eventually he secured and, passing to Green, the latter was grassed before going far. Towards the end Llanelly pressed heavily, and only splendid defensive work kept them out.

The visitors commenced a round of passing well within our 25, and a score appeared certain, but at the critical moment Ryan intercepted a pass, ran strongly for three-quarters of the length of the field, with Lewis and Cullinan in close attendance. When challenged by the full back he kicked ahead, regained the ball and beat Jenkins in a race. He eventually passed to Lewis, who scored the last and most spectacular try of the match, which was not converted.

Guy's Team—P. D. B. Spence; D. G. Robinson, D. F. Ryan, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, V. R. Preen; J. R. Popplewell, W. H. Myburgh, G. G. Cameron, B. G. Scholefield, J. Durr, A. Simpson-Smith, C. D. Malone, J. H. Cullinan.

Annual General Meeting.

THE Annual October General Meeting was held in the Anatomical Theatre on Tuesday, October 11th, and the President, Mr. Steward, was in the chair.

The minutes of the previous meeting (May 31st) having been read and confirmed, the following officials were proposed and elected by the meeting to act for Season 1927–8:—

1st Year Representative on Rugby Club Committee—D. F. Ryan.

Captain, A Team—J. C. T. Tregarthen.

Vice-Captain, A Team—D. S. Clogg.

Captain, Extra A Team—J. W. H. Jones.

Vice-Captain, Extra A Team—L. J. Pitt-Payne.

Captain, B Team—W. S. Pitt-Payne.

Vice-Captain, B Team—N. L. Barber.

Captain, Nomads—W. R. Spicer.

Vice-Captain, Nomads—E. A. R. Berkley.

The Captain, Vice-Captain and Secretary of each team are to act as a selection committee for that team.

The meeting closed with a hearty vote of thanks to the President.

1st XV Fixtures

Oct. 22	.....	Harlequins	Honor Oak Park
Oct. 29	.....	Old Blues	Honor Oak Park
Nov. 5	.....	London Scottish	Honor Oak Park
Nov. 12	.....	Coventry	Honor Oak Park

Guy's v. Bristol.

LAST Saturday, October 15th, we travelled to Bristol and enjoyed one of the best games played this season. With the exception of L. J. Corbett, Bristol were at full strength, but Guy's were compelled to make changes.—Green, Cameron and Scholefield being unable to make the journey. T. Morgan and J. H. Cullinan were included in the pack and R. J. Eustace was introduced to scrum half, Garland taking the place of Green at fly-half.

The opening was sensational and provided quite a shock for the home supporters. Within a minute of the start Garland secured the ball from a scrum formed in midfield and raced clear through the defence before any of the opponents could touch him and scored between the posts, Durr converting with an easy kick.

Guy's continued to press and, playing admirable football, were far too clever for their opponents in all phases of the game.

They passed smartly and accurately under difficulties, and were aided by fine kicking by Boyle, who also once opened up and started a movement which nearly led to a try.

Bristol lost a glorious chance when Locke, the old Birkenhead Park player and International, broke through the centre. Lilliwick failed to hold the pass and a good opportunity was lost.

However, Guy's were soon after penalised and Hore kicked a goal.

Bristol continued the attack and a fine passing movement along the whole of their back division only ended by Organ being sent into touch close to our line. Guy's were again penalised for offside and, from a difficult angle, Hore again kicked a splendid goal.

From the kick off Bristol attacked and Tucker, passing to Coventry, sent Lilliwick away, but the referee adjudged Tucker's pass forward. The home side were now combining much better and with greater effect. Guy's then set up pressure, but Burland relieved. Popplewell came through with a strong dribble but the home side were equal to the occasion and prevented a score. Thus, at half time Bristol led by 6 points to 5.

The second half opened with a desperate raid by our forwards. Carter saved and sent Locke and Stanishcombe away. A forward pass by the latter enabled Guy's to make ground.

First Burland and then Locke broke through, but our marking was particularly good and the attacks by the home side were upset by our defence.

Eventually Shaw broke away from a line-out and, on being tackled, passed inside to Parsons. Coventry completed the movement by going over close in, Hore's kick being disallowed owing to an infringement.

Soon after Durr reduced the deficit by kicking a long, but straight, penalty goal.

Subsequent play was largely confined to the Guy's half, and only extraordinary good work by our defence kept the home side out. Several times Bristol were nearly in, but our defence held out and we had to acknowledge defeat by 2 penalty goals and a try (9 points) to 1 goal and a penalty goal (8 points).

Judging by the enthusiasm of the spectators and the local press comments, Guy's are very popular visitors to Bristol. We have happy recollections of our previous encounters with Bristol, and we look forward to next season, when we shall have the opportunity of reciprocating the good fellowship that exists between these two clubs. It was a fine hard sporting game, in which neither side spared themselves.

J. Durr, J. R. F. Popplewell and W. H. Myburgh played particularly well, whilst T. O. Garland was one of the most prominent players on the field.

Our three-quarters, in particular Spence and Lewis, played with rare judgment and Boyle gave a great display.

It is particularly pleasing to see Guy's get off the mark so quickly—many a match is lost through slowness in settling down. Let us hope they will keep it up in the future.

Guy's Team—V. G. Boyle; T. G. Robinson, D. J. Ryan, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, R. J. Eustace, J. R. F. Popplewell (capt.), W. H. Myburgh, J. Durr, J. H. Cullinan, C. D. Malone, A. Simpson-Smith, T. Morgan, J. H. Richmond.

Association.

Guy's v. Old Citizens.

ON Saturday, October 15th, we visited New Eltham, where we met the Old Citizens in a very fast and most enjoyable game. We were beaten 4–0, but it was a game well worth while in more ways than one, for it showed very plainly the weaker spots in our team. Perhaps the most outstanding feature is the lack of co-operation. This exists not only amongst the forwards, for there is a very grea[t] tendency of the defence to kick the ball too far up the field, when it invariably goes to one of the opposing defenders. The advantages of team work were well demonstrated by our opponents, for while they had no individually brilliant players, they played, as a whole, extremely well.

The game opened fairly evenly with both sides attacking strongly. The ball rapidly travelled from end to end, and for most of the first half there was very little to choose between the two teams. After 20 minutes' play, however, the Old Boys' forwards broke through our defence and scored. Play continued in much the same manner, and on two or three occasions we gave the opposing goalkeeper very good reason for some anxiety. We failed to score, however, and half time arrived with the score 1–0 against us.

On resuming the game was of a different type. The ball was quickly transferred to our half, and for the rest of the game seldom left it. We seemed to have lost the team work we had hitherto displayed and, as a result, not once did the Hospital forwards get going during this half, and the backs and halves exhibited their great failing of over-kicking, when a gentler pass to a forward would be of infinitely more value. The Old Citizens maintained considerable pressure on our goal, and before long had scored twice. From the tackling point of view the defence played up quite well, but still the play kept in our own half. Once or twice we raided our opponent's goal, but we could not get the ball into the net.

Shortly before the end the Old Citizens scored their fourth goal, which glided in from Brummitt, who played very well at back, his kicking and tackling being very sound. The other newcomer to the team, Stubbs, also played a good game at left half, and if only we can learn that it is team work which gives by far the best results our eleven ought to be quite a strong one.

Guy's Team—Lomax; Ellis, Brummitt; Blaikley, Smallshaw, Stubbs; Ashling, Cantor, Evans, Fulford, Small.

Hockey.

Guy's v. East Surrey Regiment.

ON Wednesday, October 5th, the Hockey team opened their season with a good win, beating the Depot of the East Surrey Regiment by 10–1.

The Hospital was represented by T. H. Hills; F. R. Hayward, F. E. Camps (capt.); R. A. Sykes, H. O. Lyne, — Sharpe; A. H. Curtis, — Rowlands, R. Catchpole, S. R. Peatfield, W. W. Jones.

From the start the Hospital were superior in all departments; their forwards could never make any impression upon our defence.

The feature of the game was the play of Curtis on the right wing, his centering and shooting being both accurate and well-timed. Peatfield and Catchpole were a great trial to the opposing defence.

At half time the Hospital led by 5–1.

Goals were scored by Catchpole (4), Peatfield (3) and Curtis (3)

It is unfortunate that Lyne, who was struck on the knee by the ball, has developed traumatic synovitis and will not be allowed to play for a few weeks.

Golfing Society.

Inter-Hospital Cup.

First Round.

Guy's v. St. Thomas's.

THE first round of the above Cup was played against St. Thomas's Hospital at Oxley on Thursday, October 13th, and was lost by 11 matches to 1 match.

Our opponents fielded a very strong side, evidently knowing our reputation, and determined not to leave anything to chance.

The individual play was certainly up to standard, but we were lacking in that extra length and accuracy of pitch shots so characteristic of the lower handicap men.

Our opponents secured such a decisive victory because they were better golfers, and in several cases men of greater experience in match play.

The outstanding match was that between Pye-Smith and Goadby. The former is to be most heartily congratulated, not only because he has at last won a match, but also because his victory was over an opponent of greater experience and considerable renown.

Results

Guy's		*St. Thomas's*	
K. Whitworth	0	H. M. Yardley (4&2)	1
W. J. Cotton	0	R. Nutt (1 up)	1
E. J. Pye-Smith (2 up)	1	H. K. Goadby	0
C. D. Malone	0	N. M. Jerram (4&2)	1
J. A. Vernon	0	M. Albury (4 & 3).....	1
O. Ive	0	C. G. Windsor (5&3)	1
A. T. D. Gibbings	0	L. G. Clayton (8 & 6)	1
E. C. Duffett	0	G. A. B. Walters (2&1)	1
	1		7
K. Whitworth & W. J. Cotton	0	R. Nutt & H. K. Goadby (7 & 6).....	1
C. D. Malone & J. A. Vernon	0	H. M. Yardley & M. Albury (4 & 3)	1
E. J. Pye-Smith & O. Ive	0	N. M. Jerram & C. G. Windsor (4 & 3).....	1
A. T. D. Gibbings & E. C. Duffett	0	L. G. Clayton & G. A. B. Walters (3 & 2)	1
	1		11

Annual General Meeting.

The Annual General Meeting will be held shortly, and it is hoped that many members, both old and new, and anyone who is interested in the Royal and Ancient game will turn up, as there is business of particular interest and importance to be transacted.

We hope that the President of the Society, Dr. Cameron, will take the chair.

Notices of the day and time will be posted in the Colonnade.

E. C. DUFFETT.
Hon. Sec.

Notice.

PROFESSOR T. SHENNAN, of Aberdeen University, has prepared a new edition of his book, *Post Mortems and Morbid Anatomy*, which has been out of print for some time. This will be published during October by Messrs. Faber & Gwyer. The book has been enlarged to make it a text book of special pathology as well as a manual for use in the post-mortem room; the additions not only make the volume more useful for students and practitioners, but also give it a value for the practising pathologist and the investigator of pathological problems.

Birth.

MATSON—On October 13th, 1927, at Woking, the wife (née Viveash), of Robert C. Matson, M.R.C.S., L.R.C.P., Capt. R.A.M.C. (retired), of Fir Lodge, Hook Heath, Woking—a son.

EDS. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *November 5th, 1927.* *Number 1025*

PASSIM

UNTIL recently, the powers that be have had their time fully occupied in rectifying the general deficiency of housing accommodation, which was caused by the suspension of building during the war. This has of necessity directed their attention to the provision of houses for a large and most important section of the com munity—the industrial workers and their families —who cannot, owing to altered conditions of living, rely as in the past on their own enterprise to supply them with their homes. The present rate of progress indicates that, in the near future, the supply of such houses will be adequate for the demand for them, and it is gratifying to us to realise that, when such a time comes, there will arise an opportunity for grappling with an even greater problem, namely, the abolition of the slums.

This problem is one that we, as members of the medical profession, must consider with unstinted mental energy, for only when a satisfactory solution has been found, by the final abolition of the slum evil from our big towns and cities, will we be able to tackle such diseases as tuberculosis, rickets and rheumatic infections—to mention just a few—by treatment which has any pretence to be prophylactic. It is regrettable that in an Age in which the doctrine of therapeutic medicine is to prevent, rather than treat, the disease, the Medical Profession has been so reticent in its endeavours to put into practice one of the greatest of prophylactic measures, by urging the necessity for the better housing of the poorer classes.

It is, therefore, pleasing to realise that early next year Mr. Chamberlain, the Minister of Health, is intending to put the matter before the attention of Parliament.

Lieut.-Colonel Fremantle, in his book entitled *The Housing of the Nation*, a review of which appeared in our issue of May 7th, says, "the housing problem is no new thing. In all past ages the lowest grades of the people have lived in hovels. The slums of our towns date at least from the industrial revolution and the demand of cheap labour in the factories. What is new is not the problem, but the growing public realisation of the problem and the growing demand for higher standards."

That there is a "growing demand for higher standards" in existence, is certain when we think that, as recently as the middle of the 19th century, the wealthy citizens of London were content to live in narrow and unhealthy streets and were not greatly concerned about sanitary arrangements. In those days there were open sewers on either side of the streets, and it was then that the custom was introduced of the lord, when walking with his lady, taking the side nearest to the street, so that his lady would not be splashed with sewage by passing vehicles. About that time an investigation made in one of the best parishes in London, St. George's, Hanover Square, showed that 1,465 families were living in 2,174 rooms and that, of these families, 929 had only one room each for the whole family. A little imagination will show to us what the conditions were then of the overcrowded and more needy parishes of the East of London.

This illustration makes it clear that the improvement since those days has been considerable, but we feel it is not easy to define the dimensions of the slum problem as it presents itself to reformers to-day. Mr. George Hicks, speaking at the Trades' Union Congress held recently at Edin-

burgh, said that there were still "3,000,000 of our people living in disease-ridden, fever-stricken slums." What is certain is that in practically every town, excepting those of recent growth, there are areas where people are housed under wretched conditions, where the comfort of the dwelling is conspicuous by its absence, the lighting bad and the ventilation, sanitation and facilities for keeping food such as to warrant the wholesale spread of disease. We have only to recall some of the houses visited during our work on the "district" to realise the existence of such areas in Bermondsey—and Bermondsey is one of the least offensive of the slums of London.

What, then, is the solution to such a problem as this? There can only be one possible mode of treatment—the complete removal of the offending buildings and their replacement by modern dwellings. Already in Bermondsey much has been done in this respect, many of the worst areas having been cleared of their unhealthy back-to-back houses, which have been replaced by modern tenements.

But there are great difficulties to be faced. Firstly, there is the great expense entailed in providing temporary and, eventually, permanent dwellings for the inhabitants of the condemned slum areas. We feel that in this respect the expense will be well repaid by the improvement in the health and mental outlook of the lower classes, in both of which respects there is, at the present time, great room for improvement.

The other main difficulty is the disinclination of a section of the slum population to leave their homes, being unable or unwilling to accept the alternative accommodation offered to them by the borough councils. They accordingly drift into houses of neighbouring districts, which they quickly reduce to a level little better than that of the dwellings from which they were driven. *The slum mind, as well as the slum dwelling, has to be faced,* and the slum mentality cannot be swept away at one stroke.

Only by the judicious expenditure of the taxpayer's money and the extensive cultivation of a wider and higher outlook in the mind of the slum dweller, can these very real difficulties be overcome. We feel that this is no impossible task, and that the latter difficulty can be greatly lessened by the influence of the medical practitioner concerned, who will find that many will welcome both his help and the chance given them to move into a decent home.

▭

We are asked to announce that Mr. Kelsey Fry and Professor Gibson will give a demonstration of the Walkerite Denture Process in the Chemistry Theatre of the Medical School on the evening of Monday, November 21st, at 8 p.m.

▭

Newland-Pedley Gold Medal Examination, 1927—The following awards have been made: T. M. Calhaem, *Gold Medal*; H. H. Kenshole, *Certificate.*

▭

The following Appointments have been made:—

House Physicians—
To Dr. Beddard, Mr. E. T. Clifton.
Dr. Hurst, Mr. C. B. Picken.

House Surgeon—
To Mr. Steward, Mr. S. C. H. Lane.
Mr. Rowlands, Mr. S. L. A. Clarke.

Out-Patient Officers—
Messrs. R. Jarman, W. Leslie, H. W. A. Post and J. M. Turner.

Assistant House Surgeons—
To Mr. Hughes, Mr. D. E. Dunnill.
Mr. Davis-Colley, Mr. G. W. Rake.
Mr. Bromley, Mr. R. S. de Bruyn.
Mr. Slesinger, Mr. J. K. Moore.
Mr. Ogilvie, Mr. C. G. Townsend.

Obstetric Resident—
Mr. L. R. B. Birt.

Throat and Ear House Surgeon—
Mr. E. Clayton-Jones.

House Physician for Diseases of Children—
Mr. S. Carnofsky.

Clinical Assistant in the Throat and Ear Department—
To Mr. Mollison, Mr. N. E. Kendall.

Genito-Urinary and Orthopædic House Surgeon—
Mr. J. R. C. Spicer.

▭

On Armistice Day, November 11th, Holy Communion will be celebrated in the Chapel at 7 a.m. and 8.45 a.m. The names of those who fell in the war should be sent to the Chaplain not later than November 10th, if it is desired that they should be commemorated at these services.

The customary short Memorial Service will be held at the Memorial Archway at 10.50 a.m. on that day.

▭

We have been requested to announce that the Residents' Annual Ball will be held on Thursday, December 8th, at the New Princes' Galleries, Piccadilly, and that particulars will be announced later.

Obituary.

Col. Peter Paget, A.M.S., T.A., T.D.

COLONEL PETER PAGET, A.M.S., T.A., T.D., whose death on the 17th ult. was announced in *The Times* of the 19th, received his training for the medical profession at Guy's Hospital.

Photo by Elliot & Fry.

He took his M.R.C.S.(Eng.) and L.R.C.P.(Lond.) in 1889, and acted at Guy's Hospital as House Surgeon in 1889 and House Physician in 1890.

On leaving Guy's he held the appointment of Resident House Physician to the Royal Leicester Infirmary.

He was in private practice at Tenterden, Kent, for many years, and later in Hove, Sussex, until the outbreak of war in 1914.

He had always been keenly and actively interested in the R.A.M.C. He was gazetted Lieut. in 1896, Captain in 1899, Major in 1907, Lieut.-Col. in 1918 and Colonel in 1925.

On August 4th, 1914, he was mobilised, attached to the 5th Buffs, and sent out to India in October of that year. In 1915 he served in Artabia with the Aden Field Force, going into action with the Aden Moveable Column. He returned to India with the 5th Buffs in 1916, and was invalided home from there suffering from severe dysentery. After a few months' sick leave he served first as member and then as President of a Travelling Medical Board. About this time he was awarded the Territorial Decoration for "long and meritorious service."

In 1918 he was appointed O.C. Military Hospital, Hounslow, and in 1919 O.C. Military Hospital, Kingston, and again O.C. Military Hospital, Hounslow in November, 1919.

Subsequent to disembodiment in January, 1920, he was appointed Medical Superintendent, Ministry of Pensions, Neurological Hospital, Shotley Bridge, which post he resigned on being appointed, by the Army Council, Deputy Assistant Director of Medical Services, 42nd (East Lancs.) Division for a period of four years. This appointment was abolished by the Army Council in 1922. He was, later, Regimental M.O. 4th (City of London) Royal Fusiliers from 1923 to 1925, and relinquished this on his promotion to Colonel. He was retired, having reached the age limit, on August 4th, 1926.

He was in private practice in London up to October 8th, went into a nursing home for a serious operation on the 11th, and passed to his rest on October 17th in his 63rd year.

Change of Address.

R. D. Owen, L.R.C.P., F.R.C.S.(Edin.), 24, Park Place, Cardiff.

James Bromley Howell, Applemoor, Applemoor Hill Dibden, Southampton.

Eric R. Webb, Staff Quarters, Dorunda Ranchi, Biher and Orissa.

Whitfield Harris, Vivary Lodge, The Park, Taunton, Somerset.

H. Hoakai, c/o P.O. Box 162, Georgetown, British Guiana.

Dr. H. J. Spon, 6, Via Cavour, Ospedeletti Ligure, Italy.

Two Cases of Cerebral Tumour.

A Lecture given by Dr. Symonds in the Anatomical Theatre, Guy's Hospital, October 17th, 1927.

GENTLEMEN,—I am going to show you to-day two patients who have been successfully operated upon for cerebral tumour. Before I bring them in I want to say something about the symptoms of cerebral tumour in general. These symptoms one divides into two groups. The first are the symptoms and signs of increased intracranial pressure. As you know, the brain is contained within a comparatively rigid fibrous capsule—the dura mater—and that, again, within a rigid bony capsule—the skull. Actually, under normal conditions, the brain is smaller than its fibrous capsule, the dura mater, so that there is room for a little expansion. Whenever one coughs, or sneezes, or strains, one obstructs the outflow of blood from the brain, and therefore as a result there must be a temporary increase in the intracranial volume. And in conditions of mental and physical exertion also the cerebral volume is increased by capillary dilatation. Such degrees of increased volume are provided for by the physiological safety margin, and do not therefore cause sufficient increase of intracranial pressure to result in headache. When, however, the intracranial contents are increased beyond the physiological measure, as by new growth or inflammation, headache results.

The headache of cerebral tumour, in its early stages, is apt to be intermittent, coming on suddenly and severely and lasting for a few hours. At its height it is quite often associated with vomiting. The reason for the vomiting is not quite clear, but probably it is due to congestion of the vagal centres in the medulla as the result of impediment to the venous outflow. This is the more probable because it is observed very often that there is a marked slowing of the pulse—another physical sign that one would expect to follow stimulation of the vagi.

In addition to these important symptoms of increased intracranial pressure, we have a most valuable physical sign which we call papillœdema—a swelling of the papilla of the optic disc. This swelling of the optic discs is a mechanical result of the increased intracranial pressure. The blood returning from the nerve head passes, by way of the ophthalmic veins, into the cavernous sinus within the cranium. It follows that an increase in the intracranial pressure will impede the flow, and if that increase of pressure is great enough and lasts long enough it will lead first to dilatation of the veins, and subsequently to transudation of plasma through their walls. This results in the characteristic picture of papillœdema or "choked disc" when the fundus is observed with the ophthalmoscope.

We call this condition papillœdema, and not optic neuritis, because we have to distinguish between papillœdema, which is a purely mechanical condition, and true optic neuritis, which is an inflammation. There is a real pathological distinction, although the appearance in the fundus may be difficult to distinguish. So headache of the kind I have described, with vomiting and slowing of the pulse and papillœdema, are the symptoms and signs of increased intracranial pressure.

We come to our second group of symptoms of cerebral tumour, which we call localising symptoms and signs. These depend upon the actual situation of the tumour within the brain and in most cases precede by a considerable interval the symptoms and signs of increased pressure.

Case 1—

This man is aged 29, and by occupation an electrician. He came up to the Hospital in April, 1926, with a complaint of headache and giddiness. His family history and previous history are without any particular importance. His present illness was of two months' duration. The story was that the headaches were intermittent, sudden in onset, of a throbbing nature, situated at the back of the head, occurring every three or four days, lasting two or three hours at a time, and very severe while they lasted and,at the height of their severity, they were often associated with vomiting. He had noticed that sometimes bending down, and then rising suddenly, would bring on one of these severe headaches. During the week or two preceding admission he had been aware of two other symptoms: First of all that he was a little unsteady in his walking and, secondly, that he occasionally had double vision. On admission he showed the typical papillœdema which I have just described—an advanced degree of swelling of both discs. So that we had a complete clinical picture of increased intracranial pressure — headache, vomiting and swelling of the discs. The only symptom we had which might be of localising value was the giddiness, and we confirmed this on observation. In walking he showed a distinct tendency to stagger towards the left. He had a little nystagmus on looking both to the right and to the left. When we put him through the finger-

nose-finger test his movements were not well co-ordinated on the left side. These symptoms were suggestive of a lesion of the left lobe of the cerebellum.

The cerebellum is an organ about which we seem to know much less with advancing years. We know a great deal about what it is not responsible for and very little about its actual functions. That applies particularly to man. It has become increasingly clear, from the advance of experimental physiology, that one cannot apply the results of experimental lesions of the cerebellum in animals exactly to corresponding lesions in man. So that we have to judge the functions of the cerebellum in man largely from what we see when it is diseased. A lesion of the left lobe of the cerebellum will lead to a tendency to stagger towards the left. It will lead to nystagmus, which is usually most evident when the patient looks towards the left. It will also lead to disturbance of co-ordination in the limbs on the same side.

So, in addition to the increased intracranial pressure, we judged that he had a lesion of the left lobe of his cerebellum. Now we had to consider with what we might be dealing; something that was causing increased intracranial pressure, and, therefore, a lump of some sort—that lump situated in the left lobe of the cerebellum. Probably it was a tumour, but we also had to consider the possibility of its being a tuberculoma, or a gumma. Our next step was to examine his blood, and we found the W.R. negative. The question arose as to whether his spinal fluid should also be examined. I am not quite clear in my mind whether I advised that procedure, or whether it was done by the house physician. Lumbar puncture should be approached cautiously in increased intracranial pressure, especially if a tumour in the posterior fossa is suspected, because the situation is a dangerous one.

The increased pressure in the cranial cavity is apt to push down the cerebellum on to the top of the medulla, so that you have a wedge of cerebellum between the fourth ventricle and the posterior margin of the foramen magnum. A sudden withdrawal of fluid from below may lead to an extra amount of jamming, and cause fatal pressure on the medulla. In this case lumbar puncture was done without any ill result. The pressure of fluid was equal to 380 millimetres of water, the normal pressure being 150. The W.R. was negative. There was no increase of cells, the protein was increased to .06 per cent. instead of being .02 per cent. This one often sees in cases of cerebral tumour.

We thought of the possibility of tuberculoma. In the brain tuberculoma is comparatively rare, and it is relatively much commoner in children than in adults. The fact that the patient was an adult was against tuberculoma. On the other hand, one may say that tuberculoma is more commonly found in the cerebellum than in any other part of the brain. The probability, however, was that we were dealing with a tumour. Under observation in the ward the patient became rapidly worse. The headaches increased in frequency and severity. The swelling of the optic discs not only increased but began to be organised, so that the discs appeared whiter. When that happens there is a danger of permanent loss of vision. A man may have a swelling of his optic discs without any loss of vision, but when organisation occurs leading to optic atrophy the nerve fibres are strangled and vision is gradually lost.

The question arose, what was to be done? We decided to ask Mr. Bromley to do a decompression, primarily to relieve the man's pain and to prevent him from going blind, but with the hope also that he might find a removable tumour. At the operation the left lobe of the cerebrum appeared larger than the right. No superficial tumour was seen. The cerebellum was not incised. After the operation the patient remained very ill for about a month, but the swelling of his discs gradually subsided; he had no headache, and at the end of three months he was beginning to sit up and move about. We tested his co-ordination again, and it was somewhat defective still in his left arm. About three months after the operation he was walking fairly well.

He has been back to work since March, 1927. So that you see it was practically a year after his first symptoms commenced, and nine months after the operation, that he was able to return to his work as an electrician. He is getting on perfectly well. His vision is impaired, being about 6/12 in both eyes. The swelling has gone from the optic discs, leaving a little organised exudation. He has got a splendid operation scar, with no swelling at the back of his neck. He walks perfectly well. He has still got nystagmus to the right, and perhaps a little more to the left. He shows no inco-ordination of his limbs and complains of no symptoms whatever.

The question is, what has happened? No tumour has been removed. You can argue, if you like, that he did not have a tumour at all there, that he had some curious unaccountable inflammation of his cerebellum which caused him to beaffected in that way. We do occasionally see odd cases of non-suppurative encephalitis (not encephalitis lethatgica, but some other form) affecting various parts of the brain, which lead to signs like those of cerebral tumour, and which subside spontaneously. But there is another and much more probable

explanation of the complete disappearance of this man's symptoms.

We know from experience that a tumour no bigger than the tip of one's finger may cause increased intracranial pressure, if in the right situation. The cerebrospinal fluid, after being secreted in the lateral ventricles, is discharged into the third ventricle, from the third ventricle into the fourth ventricle and gets out, via the foramen of Magendie, through the roof of the fourth ventricle into the general subarachnoid space. Thereafter, it is reabsorbed into the great venous sinuses. If the pathway of the cerebrospinal fluid is obstructed, the ventricles become distended, leading to the condition called secondary hydrocephalus, and this causes symptoms of increased intracranial pressure. So that any tumour so situated as to obstruct the outflow of cerebrospinal fluid from the ventricles will lead rapidly to symptoms of increased intracranial pressure. Here is a section of the brain showing the sylvian aqueduct and the fourth ventricle. You can see that a tumour of the cerebellum is very likely, by pressing downwards, to obstruct the channel outflow from the ventricles and produce a secondary hydrocephalus. The probability is that this patient still has his tumour, that it is a small tumour of some chronic variety deeply situated in the cerebellum and that it may have been there for some months even before he began to have any headaches at all. The tumour then rather suddenly caused a blocking of the sylvian aqueduct and gave rise to a hydrocephalus. Under these circumstances, quite naturally, the effects of the tumour in the cerebellum would be aggravated because, the whole of the intracranial pressure being increased, the pressure effects of the tumour on the local circulation would be increased also. But the operation of decompression relieved the block, and so the symptoms and signs of the increased intracranial pressure have disappeared, and nearly all the symptoms of the tumour. The probability is that sooner or later we may have a recurrence of the symptoms.

But we may ask ourselves for a moment of what nature is the tumour likely to be? We have considered the possibility that we were dealing with a small tuberculoma. It is in the nature of a tuberculoma to become calcified and heal altogether, so that we may hope for this same reason that it is a healed tuberculoma. On the other hand, the possibility is that it is a variety of chronic glioma. These latter are in a sense malignant tumours, and are often rapid growths. But there are varieties of glioma which are chronic and may last ten years before they kill the patient. Anyway, the result of the operation being to save this man's life and vision and to give him a useful existence, it was well worth undertaking, although it looked at the time like a desperate measure.

Case 2—

This lady is aged 57. I saw her first in January, 1925, when she was brought to me with the major complaint of headaches. She had had these headaches for three or four years. At first they had occurred only at intervals of several weeks; latterly they had become rather more frequent, and tended to occur especially when she awoke in the early morning—always rather a suggestive point in favour of increased intracranial pressure. Occasionally with the headaches she had nausea and occasionally a little vomiting. That, by the way, is a point worth comment. From the text books one is apt to get the idea that vomiting, in increased intracranial pressure, is not preceded by nausea. That is true in a certain number of cases. In an equally large number of cases not only is vomiting preceded by nausea, but nausea is a very prominent feature with occasionally very little vomiting. She had had these headaches then with nausea and vomiting especially in the early morning, increasing in frequency and severity for three or four years. Two years previously she had noticed numbness in her right thumb. This feeling of numbness and uselessness gradually extended to the fingers, so that the finer movements of the hand became impossible, and she could not sew. For six months before I had seen her she had experienced some difficulty in getting out her words—she could not bring the right word always to the tip of her tongue. This was the sum of her complaints.

On examination she had a slight degree of swelling of her optic discs. She showed therefore the clinical picture of increased intracranial pressure, although it had taken three or four years to develop up to the point of causing papillœdema. I have remarked—though I cannot explain the fact—that the older the patient, it would appear, the longer may the symptoms of increased intracranial pressure go on without leading to swelling of the optic discs. So that, if this patient had come to you with a story of headache of increasing frequency and severity, with vomiting, and had not any swelling of the optic discs, I think you should still have suspected that the case was one of cerebral tumour.

When we looked for a localisation we found the signs of a lesion of the left post-central gyrus. A lesion of that part of the brain produces a very characteristic clinical picture. It does not give a clear cut hemi-anæsthesia on the opposite side of the body, but affects chiefly the hand and the foot and interferes with postural sensibility much more than that to touch and pinprick.

In this case—I have my notes here—when I first saw her she missed all my touches on the right hand. Pinprick was described as less tender on the right hand than the left. The sense of position in the right fingers was completely lost, and she had no conception of the form and texture of objects placed in her hand. On the right foot some cotton wool touches were missed ; there was no loss to pinprick. The sense of position was defective in the toe, knee and hip joints of the right side. There was also slight weakness of the right arm and the right side of the face, and the tendon jerks on that side of the body were increased. The W.R. in the blood was negative. Under observation she became rather rapidly worse. The headaches and vomiting became more and more frequent, and her difficulty of speech increased. This was not surprising because the post-central gyrus is in quite close relation to the speech centres situated in the superior temporal convolution and supra-marginal and angular gyri.

It was considered by some of those who saw her then that nothing could be done, on the ground that usually if you operate you do not do any good, and that there was the very real danger that in that situation damage would be done to the speech centres, and the patient would be left considerably worse than before the operation. However, we based our decision to operate upon the axiom that one cannot tell the nature of a cerebral tumour until one has looked to see. A certain proportion of cerebral tumours are removable, and if you ever want to remove one you have got to be prepared—especially when the signs point to a superficial situation—to take the risk of looking. Mr. Bromley did a bone-flap operation, and he found a cyst of the meninges in the situation he had predicted. It was opened and drained, and the patient has since been perfectly well. Immediately after the operation the swelling of the discs began to subside, and her headaches were less. She has got no disability now in her hand and no numbness. She is quite prompt in recognising touches. Her sense of position is perfect. She is accurate in distinguishing the form and texture of objects by the feel and has been able to earn her living as a sewing maid during the past two years. The bone-flap has healed splendidly and her head is as good as new.

I have shown you these two cases that you may realise that the diagnosis and localisation of cerebral tumours is not always in vain. It is true that in the great majority of cases the tumour is either of a malignant type and irremovable for this reason, or if innocent is inaccessible. The responsibility of advising operation is a grave one, for the operative mortality is higher than that of any other surgical procedure, and there is the additional risk that the patient may be left alive but paralysed or aphasic as the result of the attempted removal or exploration. We were fully alive to these risks in the case of the second patient as I have shown.

The problem is all the more difficult when the diagnosis has been made early. On the one hand if the tumour is removable the earlier the operation the better is the chance of a cure. On the other hand, in the case of a patient whose headaches do not amount to much, whose vision is unaffected and whose tumour is in such a situation that it does not interfere with earning abilities or the ordinary enjoyments of life, one needs a good deal of courage to press for an operation.

There may be instances in which one has to hold one's hand and temporise. But the more one sees of these cases the more one is convinced that, given a certain diagnosis and accurate localisation, an exploratory operation should be done.

Papers by Guy's Men.

W. E. Tanner, M.S., F.R.C.S. The Uses of the Rectal Tube, *Clinical Journal*, Oct. 19th, 1927.

Sir Wm. Hale-White, K.B.E., M.D., LL.D. Harveian Oration on Gilbert, Bacon and Harvey, *Lancet*, 1927, ii, 847 ; *B.M.J.*, 1927, ii, 713.

E. H. J. Berry, M.B., M.R.C.P. Alkali Treatment of Scarlet Fever, *Lancet*, 1927, ii, 858.

M. Weinbren, M.R.C.S., D.M.R.E. Ultra-Violet Radiation in the Treatment of Herpes, *Ibid.*, 865.

C. Lambrinudi, F.R.C.S. New Operation on Drop-Foot, *Brit. Jour. Surg.*, xv, 1927, 193.

George F. Stebbing, M.B., B.S. Fractures of the Upper End of the Femur, *Ibid.*, 201.

C. H. Fagge, F.R.C.S. On Injuries of the Semilunar Cartilages, *Ibid.*, 273.

Ralph Brooke, F.R.C.S., Peri-Arterial Sympathectomy with Ligatures of the Femoral Vein in the Treatment of Diabetic Gangrene: A Record of Five Cases, *Ibid.*, 286.

J. Allan Berry, F.R.C.S. Perforation of a Meckel's Diverticulum, *Ibid.*, 331.

G. B. Dowling, M.D. (1) Case of Acute Agminata; (2) Case of Rare Seborrhœide ; (3) Case for Diagnosis, *Proc. Roy. Soc. Med.*, xx, 1927, pp. 1,828–1,830; *Sec. Dermat.*, pp. 108–110.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

The Compilation of References

By G. A. R. Winston, Wills Librarian, Guy's Hospital.

AS I am constantly hearing, particularly from students writing papers for the various Societies, that they have no idea as to where they can obtain a list of references to the subject on which they are about to write, I have been persuaded to write briefly on the compilation of references and the sources from where information can be obtained.

It is apparent to many that, by wading through the large number of bound volumes of journals, the task of finding articles, which have been written on any subject, is practically impossible. Several journals publish excellent indices each year, but the number of volumes is so large that the task of searching becomes laborious.

The making of a bibliography naturally falls into three divisions :—

(*A*) Collection of Material ;
(*B*) Arrangement ;
(*C*) Details of Construction.

(*A*) *Collection of Material*—

This is a matter more of time than difficulty in obtaining the required information. There are many excellent indices published which will give the compiler of a bibliography all that he desires.

In this direction the *Index Catalogue of the Library of the Surgeon-General's Office* will atone for all shortcomings, as in it is furnished a universal bibliography from the earliest times. At a glance the whole literature of a subject is before one's eyes, and it is impossible to over-estimate its importance to research workers.

This catalogue is published by the War Department Office of the Surgeon-General, Washington, and, roughly, it comprises an author and subject catalogue, alphabetically arranged, containing references to articles published in about 800 journals. Articles taken from periodical publications are indexed under the subject only, while monographs and separate publications are entered twice—(1) Under the name of the author, (2) under the subject.

The *Surgeon-General's Catalogue*, as it is called, has been in existence since 1880 and has now reached its third series. The first series, which was commenced in 1880, was completed in 1895, and contains 16 volumes. The second series was commenced in 1896 and completed in 1916, and contains 21 volumes. The third series, which is now being compiled, was commenced in 1918 and has now reached its sixth volume, thus bringing the third series to the letter I. One volume is published each year.

The Bibliography is brought up-to-date by having recourse to the *Quarterly Cumulative Index Medicus*, which contains the current literature of articles in medical periodicals, transactions and separate publications. It is alphabetically arranged under authors and subjects, and therefore indexes itself. In 1927 it combined with the *Index Medicus* and is published in April, July, October and January. The April number indexes journals issued during the three immediate preceding months, but is superseded by the July number, which is bound for permanence in cloth and contains in one alphabet all the references to articles published in the April number. The July number therefore contains the periodical literature published during the first six months of the year. Similarly, the January number supersedes the October number, and contains the material published during the last six months of the year. The *Quarterly Cumulative Index Medicus* is the most up-to-date publication of its kind. The main index is preceded by a list of new books, arranged in alphabetical order, followed by a subject classification of the same material.

The *Index Medicus* was started in the year 1879 as a monthly classified record of the current medical literature of the world. During the 46 years of its existence the *Index Medicus* comprises 45 volumes, as follows :—

1st Series, 1879–1899, Volumes 1 to 19 ;
2nd Series, 1903–1920, Volumes 1 to 18.
3rd Series, 1921–1926, Volumes 1 to 6.

It is consulted in exactly the same way as the other indices with the exception that, instead of being arranged under authors and subjects, it has a separate author index. It indexes itself alphabetically as to subjects.

There is published in each number of *Surgery, Gynæcology and Obstetrics* an " International Abstract of Surgery " which contains an up-to-date " Bibliography of Current Literature." This is arranged under the main headings, together with abstracts from a large number of interesting articles.

The *Medical Annual*, published yearly, is full of interesting articles and is considered to be a review of the year's work on the treatment of disease. At the end of each article is a list of references to the subject.

Dental students will also be able to compile references from the above-mentioned indices and, in addition, they will find that the *Index to Periodical Dental Literature* will help them very consider-

ably. Unfortunately, this index has not been published since 1921, but indices covering all the dental literature published from 1911 to 1921 have been issued.

(*B*) *Arrangement*—

This depends to a large extent on the purpose for which the bibliography is intended.

They are either :—

(*a*) Alphabetically arranged according to authors ;

(*b*) Chronologically arranged ;

(*c*) Classified if of great length.

(*C*) *Details of Construction*—

The initials of an author should be given in every case.

If an author is known by his last Christian name and surname, it should be placed under the last name.

In the case of a hyphened name, it is usually placed under the first name by which the author is known, as, for example, A. B. Godfrey-Smith.

Godfrey-Smith, (A. B.)—never under Smith.

The name of the periodical should be so abbreviated in order to avoid confusion as to its nationality.

The full title of the journal is unnecessary.

As regards abbreviations, the references as given in the *Surgeon-General's Catalogue* has much to commend itself, and might with advantage be universally adopted.

References to papers should contain date, volume and page. The dates of the weekly, monthly or quarterly parts need not be given, as it means searching through many pages after the journal has been bound.

The reference therefore should contain the following information in this order :—

Name of Author, Initials (in brackets), Name of Journal, Place of Publication, Volume, Year, Page.

Example :—

MILLER (J. L.) and WILLIAMS (J. L.), *Tr. Ass. Am. Physicians*, Phila., xxxv, 1920, 68–76.

In the text of the article a most useful guide to the bibliography is to insert, in brackets, a figure indicating the particular reference to which the writer refers. That is (1) denoting reference to No. 1 in the list references at the end of the article.

A reference to an abstract of a paper should state the place where it originally appeared. That is, the original article in full. This applies to publications such as the *Physiological Abstracts*.

Reports of societies need not be referred to by the name of the society, unless the column and page of the journal containing the report be also given.

There is occasionally much confusion caused by not paying particular attention to the number of the volume. Vol. ii, 1895, is not the same as 1895, Vol. ii. The former refers to the second volume of a set, while the latter to the second volume of 1895. Sometimes these are mixed up.

Attention is also drawn to sets divided into series. The compiler of a list of references should quote the series as well as the number of the volume. If there is a continuous number in addition to the series a good practice is to give both. The *Guy's Hospital Reports* is an instance of this, and should be written thus :—

Guy's Hosp. Rep., Lond., lxii (3rd Series xlvii), 1908 p.25.

This simplifies matters if the set of books has not both letterings on the backs.

When one considers the appalling waste of time caused by incorrect and imperfect references, it will be obvious that a few suggestions tending to reduce them to a minimum will be of some useful service. There is also much incorrect quotation of references, but there appears little or no attempt to standardise the form the reference should take. Only those persons who are constantly using medical literature can fully appreciate the time wasted through these errors and also through lack of references.

One important fact to be borne in mind is that references should always be verified. Especially is this the case where quotations are taken from periodicals.

The references first of all must be collected. The greatly increased number of journals make it imperative that exact references are not only necessary but essential. The thing to be avoided is the perpetuation of an error.

Occasionally one comes across an attempt to translate a reference ; this is a mistake, as all references should be given in their original language and the exact title quoted.

Students nowadays have far more facilities in obtaining periodicals or other publications which are not in their own libraries. By an introduction to the Central Library for Students they are able to obtain most of the latest books. The British Medical Association have published a very useful guide to the literature obtainable at the many medical libraries. This publication is named *Periodicals of Medicine and Allied Sciences in British Libraries*. It serves the purpose of giving to the research worker an opportunity of knowing where a certain periodical can be obtained, because it has been realised that the lack of access to the literature of a subject continually baulks the scientific worker.

Sidelights from the Sudan.

A Journey to Abyssinia.

THE border between Abyssinia and the Sudan is marked by the Pibor River, which runs down past Akobo Post to reach the Sobat River, and ultimately the Nile. Two hundred and fifty miles above the border is Gambeila, an Abyssinian town which, for convenience sake, is used by the Sudan Government as a trading post and customs station. It was to visit this that the present journey was undertaken.

The first few hundred miles of the journey from Malakal to Nasser, the last town in the Sudan, were uneventful and comparatively uninteresting; most of the villages were deserted or contained only old women and small children, as the riverain peoples are busily engaged in planting "aish" inland during the rains. At Nasser, where there is an American Mission Station, we tied up for the night, and several sick were taken aboard. The river here winds so much that it is quite impossible to travel by night.

Twelve hours after leaving Nasser we passed the mouth of the Pibor and entered Abyssinian territory. The country began to change almost immediately. Instead of the great stretches of featureless country covered by grass and papyrus the river banks took on an English parkland appearance—wide runs of short grass with great trees scattered about and here and there a low tree-clad knoll. We stopped at most of the native villages and dealt with the sick, who made us welcome in large numbers. The people of this Abyssinian border are not true Habashi; they are Anuek, and very wild and frightened. Their riverside villages are protected landwards by moats and ramparts to protect them from the raids of the hill robbers and Government tax collectors—the terms are synonymous in Abyssinia!

In between the villages one's sole occupation was shooting crocodiles, which infest the river and are a pest and a plague upon the riverain folk, taking yearly a ghastly toll. Now and then I caught one asleep on the bank and was able to bring him aboard after shooting him, but more often one had only head and eye as a mark in the water, and as they do not come up for two or three days when dead these were lost. The skins do not, I find, keep well here, and I despair of bringing any back to England, though my ship is at the moment full of them.

On the morning of the fourth day out we came in sight of the Abyssinian Mountains—a cheering sight after the dreary flatness of the Northern Sudan. They are magnificent, these mountains. At first they were distinguishable only with difficulty from the skyline, great dark blue mist-shrouded humps and ranges, forming an arc of a circle into the midst of which the little ship was steaming. As we drew nearer their covering of grass and trees stood out, with here and there a watercourse with its torrent roaring down to join the Baro River and make our progress slower and slower.

At last, seven days after leaving Malakal, we reached the journey's end. Although the whole question of relations between the two countries is still unsettled, Gambeila has been loaned to the Sudan Government as a customs station. Within the enclave a British District Commissioner superintends the sale, transport and taxing of coffee, the sole commercial entity. This coffee grows wild in the mountains and is brought down to Gambeila by Gallah labourers and despatched by steamer during the rains, when the river is open for three months, to supply the Northern Sudan and Egypt. There is, I think, no coffee quite like it; it needs neither chicory nor admixture with other strains and has a delightful aroma, peculiarly its own.

The District Commissioner is responsible for maintaining law and order within the enclave only, and here we have established a hospital and dispensary under the charge of a native doctor, who has been trained in one of our civil hospitals. Outside the enclave, forbidden ground to us on pain of an "international incident," the administration is carried on by an Abyssinian mamur, from the suite of the Ras, or King, at Addis Ababa. The present "incumbent" was suffering from a complaint only too common in this country and, in return for the little I was able to do for him, he took me up into the forbidden mountains himself, and showed me the magnificent humbling prospect of range upon range of seemingly endless hills stretching away into the heart of this strange country. In the coolth of his house later he regaled me with molten honey and fermented sugar—a truly mellifluous drink and rather more potent than one would suspect.

Here in Gambeila, within the enclave, we visited the grave of a retired British General, who, so the story runs, died some three days' journey from the post and was brought up by natives in a dug-out canoe, made from the trunk of a tree.

On arrival the gallant General had swollen so much that he could not be removed from the canoe and he has accordingly some twenty feet of earth, instead of the paltry six for which we are taught to hope.

Having dealt with the sick, "seen the sights," climbed the "Sugar Loaf" and celebrated the impending departure with the D.C. in this true outpost of the Empire, we set out on our return journey. As I write we have turned up along the border, the Pibor, and steam slowly towards Akobo Post. In a day or two we shall return to the comparative civilisation of Malakal and, I hope, bulging mail bags.

J. S.

Extracts from the Letters of a Bacteriologist in Persia.

THANKS very much for yours of to-day. I am glad you have shaken off the strepts. Have you ever tried winding them round a piece of match, taking a few fresh turns every day until you have extricated the whole chain? It works very well with guinea worms. Yes, Robbie has arrived out here and one Millbank, whose name is not familiar to me. Robbie pulled me out of bed at 11.30 p.m. to answer the telephone, when he said that he had arrived and he wanted me to know. He is down at Abadun at present—150 miles away—but Millbank apparently is coming up here quite soon. Robbie seemed very pleased with life, and declared in passionate terms his love of the country. He also told me a bit of scandal that I was on no account to let get back to Lambeth. I expect you know it by now.

Some of my laboratory stuff has arrived in fair trim. The quartermaster's sturdy unpacking squad pulled an electric hot air steriliser out of its case sideways and partially deleted the little electric fittings on the top of same. Another well-meaning enthusiast flattened about five turns of the thread of the micrometer screw of my only Cambridge rocker with some heavy hard instrument, and for reasons unknown. These little things are sent to try us, as they say in the sand-fly season . . . .

Up here in Fields there are about 500 white people all told, and many more partly white . . . .

Quite a pleasant fellow if you tickle him the right way, but nearly as complete a mountebank as ——. He has a tremendous reputation as a surgical miracle worker round here among the natives and white people, and takes an appendix out sometimes as often as once a fortnight. He then comes rushing into here all flushed and rosy, "Here is a very interesting appendix for your collection of path. specimens; could you cut out a section of it and tell me the exact pathology of its causation?" and then walks quietly out to hide the sudden gush of tears that comes to his eyes at the sight of my open-mouthed wonder . . .

The medical chiefs decided to send him back to England invalided out of the service. Because I would not fight the medical chiefs and get them to reverse their decision I incurred the undying and deadly enmity of ——, and it ended up with a free fight between us the night before he left for England, in the course of which I knocked him down seven times. He got up, rushed at me and butted me with his head, knocked me down and bit me, whereupon I became decidedly annoyed and choked him into unconsciousness. Incidentally, he weighs about 10 stone and I am 15, and he had used every mode of inciting me to fight him from 9 p.m. until 2.30 a.m., sitting in my bungalow and drinking my whiskey. I agreed finally because I was tired and wanted to go to bed . . . .

Get him away from his "surgical reputation"—difficult because he wears it like a cholera belt, day and night, next the skin—and he is quite a genial amusing old fellow, with a keen eye for a bit of woman flesh.

The weather hereabouts is decidedly warming up; it was 80° F. in the laboratory to-day, but did not feel hot because it is dry; on occasion it goes up to 130° F. in hot weather. We have big fans everywhere.

Yesterday I had some blood in a tube given me from which to grow something. It was from a lung puncture, and called "aspirated fluid." Being puzzled what to do with it I melted a tube of "Salmedia" nutrient agar, poured in about 3 c.c. of the blood and sloped it in a cool place. Next day gave a pure and copious growth of a bacillus morphologically indistinguishable from B. influenzæ.

Appointment.

C. V. T. Colling-Baugh, L.D.S., R.C.S.Eng., Honorary Dental Surgeon to the Kent and Canterbury Hospital; Dental Surgeon to the City of Canterbury Mental Hospital; Dental Surgeon to Saint Edmund's School, Canterbury; Dental Surgeon to Ministry of Pensions, Canterbury Area.

Correspondence.

E. H Starling Memorial Fund.

DEAR SIR,—In July last we informed you that the School Council had started a Fund in memory of the late E. H. Starling, who was a student, demonstrator and lecturer in this Medical School. The Departmental Library in the Physiological Department owes its inception to Starling, and for many years was maintained by private subscription. It is proposed that the interest on the capital sum representing the Memorial Fund shall be utilised each year for the purchase of standard journals or books dealing with Physiology, and that a book plate bearing Starling's portrait and commemorating his connection with Guy's should be inserted in each volume or journal so purchased.

Attached is a list of contributions which have already been received, and further contributions will be gratefully acknowledged by the undersigned. A complete list of the contributions will be published at a later date.

Contributions

	£	s.	d
H. L. Eason, Esq., C.B., C.M.G.	5	0	0
Dr. J. J. Conybeare	2	0	0
Dr. A. F. Hurst	5	0	0
Dr. J. H. Ryffel	2	2	0
Dr. G. W. Nicholson	5	5	0
H. B. A. R. Densham, Esq., B.Sc.	2	2	0
H. C. Malleson, Esq., L.D.S.	1	1	0
Sir William Hale-White	5	5	0
N. E. Pitt, Esq., B.Sc.	1	1	0
W. M. Mollison, Esq., M.Ch.	5	5	0
J. Lewin Payne, Esq., L.D.S.	1	1	0
Dr. J. Fawcett	5	5	0
Total to date	£40	7	0

We are, Yours faithfully,
T. B. JOHNSTON, *Dean.*
Medical School, M. S. PEMBREY,
Guy's Hospital, S.E.1. *Professor of Physiology.*
October 22nd, 1927.

Reviews.

Ultra-Violet Radiation and Actinotherapy. By E. H. RUSSELL, M.D., and W. K. RUSSELL, M.D. 2nd Edition. Published by Messrs. E. & S. Livingstone. *Price* 15*s*; *Postage* 9*d*.

THE early appearance of the second edition of this book shows that the authors have achieved the success which their work has merited. The book deals chiefly with artificial ultra-violet radiation; it is well illustrated, and apparently every type of ultra-violet lamp in common use is described and its merits discussed.

No better book can be recommended to the student interested in artificial light therapy.

Light Treatment in Surgery. By O. BERNHARD. 1st Edition. Published by Messrs. E. Arnold & Co. *Price* 12*s*.

DR. BERNHARD'S book, translated from the German by Dr. King Brown, records the experiences of one of the earliest, if not actually the first, of the pioneers of heliotherapy in the Alps, for Dr. Bernhard adopted this line of treatment at his clinic in the Oberengadin in 1902.

The book deals essentially with true heliotherapy, and in Part I the author discusses fully the biological effect of ultra-violet radiation, and devotes a chapter to the "sensitisation" effects of light. Of especial value to those interested in ultra-violet light therapy are the numerous references, in the form of footnotes, to articles appearing in the German literature.

Part II is devoted to the therapeutic application of sunlight therapy as carried out at Dr. Bernhard's clinic. The influence of climate, as well as the influence of light, is discussed in relation to the treatment of surgical tuberculosis. Numerous cases are cited, and a large number of illustrations demonstrate the remarkable results which he has obtained.

There can be little doubt concerning the extraordinary therapeutic value of heliotherapy when carried out under the climatic condition present in the Alps. At present artificial ultra-violet light therapy is but a poor substitute for true sunlight in the treatment of tubercular lesions, and it would appear that the essential factor is not the quantity or the quality of the ultra-violet radiation to which the patient is exposed, but rather to some metabolic influence of the atmospheric and climatic conditions. A comparison may be drawn between the hot and stuffy treatment rooms where an open arc lamp is used with the invigorating climate of the Upper Alps.

Sport.

Rugby.

Guy's v. Harlequins.

OUR visitors to Honor Oak Park on Saturday October 22nd, were the popular Harlequins XV. It was a great pity that the conditions were so deplorable for such an attractive fixture. Rain fell continuously throughout the game, making the ground heavy and difficult for players to keep their feet.

Guy's fully deserved their win, and would have scored several more points had they taken advantage of the opportunities that came their way.

Durr was unable to play, but otherwise we fielded a full side. On the other hand, our visitors were without Wakefield and Gibbs, who were assisting London against the Waratahs, and Laird and Hubbard, who were injured earlier in the season. We were pleased to see the old Guy's forward, E. H. Fouraker, included in the 'Quins pack—he was always in the thick of the scrums and was prominent throughout.

From the kick-off Guy's attacked, and Preen cleverly gave the dummy, only to be brought down soon after. Popplewell then dribbled the ball into the 'Quins 25, but a good punt by E. Taylor, the visitor's full back, brought temporary relief. Hogbin received in a line out and, smartly passing to Spence, enabled the latter to find touch well down the field.

The visitors then lost a golden opportunity to open the score. Taylor punted well beyond the halfway line and the visitors' threes, following up closely, secured. The ball came to Proudlock and when challenged by Boyle he gave a bad pass to Garner, when the latter had nobody to beat.

Boyle then saved in brilliant style, but damaged his knee in doing so. The visitors continued to press, but a mark by Boyle brought relief and enabled Guy's to take up the attack through Preen. He again gave the dummy and passed to Robinson, who was cleverly tackled on the line. Continuing the pressure, we kept the 'Quins on the defensive, and a cross kick by Preen nearly let Robinson in.

Guy's were penalised for feet up, and the resulting kick enabled Garner, the visitors' right winger, to race away to our 25. He was only prevented from scoring by a brilliant tackle by Robinson.

An uninteresting period of midfield play followed in which Boyle, Lewis and Garland all kicked well, but the first half ended without either side scoring.

Soon after the kick-off a scrum was ordered, and although the majority of the players were under the impression that the ball had not entered the scrum, the referee thought otherwise and allowed Pattison to go on. He would have scored easily, but Boyle was equal to the occasion and saved the situation.

In a fine forward rush, in which Scholefield and Malone were conspicuous, the ball was carried well out of the danger zone.

From this point Guy's dominated the game. First of all Robinson and then Ryan following up were nearly over. Garland fielded well and although he kicked a good length the ball went just out of play.

Then Guy's secured a most spectacular try, and, incidentally, the only score of the match. Preen gathered and, running round the blind side of the scrum, gave the dummy, passed to Lewis, who passed inside for Preen to score near the posts. It was a wonderful effort and deserved every bit of the applause it received. Morgan failed to add the extra points.

Immediately afterwards there was a glorious round of passing and inter-passing between Garland, Preen and Ryan, but, unfortunately, it was spoilt by Lewis dropping his pass when he had nobody to beat.

Preen was prominent with two good kicks to touch and play continued on the 'Quins goal line. Through over-excitement on the part of our forwards, we were penalised twice in succession, but the kicks were of little use to our visitors. Before the end Preen nearly succeeded in wriggling his way through, but a resolute defence held out and prevented any further score. Thus Guy's secured their third win this season by 1 try (3 points) to nil.

It was particularly pleasing to see the backs in such good form. Preen in particular played by far and away his best game this season. Considering the conditions the handling and passing, with one or two exceptions, were exceptionally good. Garland was again conspicuous throughout and caused some amusement in the first half by appealing for a mark when he was sliding along the slippery ground for some yards.

Ryan and Robinson were the best wing on the field; the fast running and resolute tackling of the latter was a feature of the game.

Boyle played soundly at full back, whilst the forwards, of whom Myburgh, Popplewell, Scholefield and Hogbin were the pick, dominated the scrums and made Garland's work comparatively asy.

Guy's v. Old Blues.

FOR our match against the Old Blues at Honor Oak on Saturday, October 29th, there was a large crowd and the conditions were perfect. A good drying wind throughout the night, aided by a strong sun during the morning, made the ground ideal. A. G. Johnson took the place of V. G. Boyle, who was injured in the match against the Harlequins, and R. J. Eustace played at scrum half vice T. O. Garland, who was resting. Incidentally, Garland, after his display for Surrey last week, should be well in the running for a Trial Cap.

Our visitors were without Franklin at full back, but they are fortunate to have such a capable substitute in W. W. Neilson, who played in the Scottish trial games last year.

It was a very fast and open game from start to finish, and the tackling and marking on both sides deadly throughout.

The Old Blues played only seven forwards in the pack with an additional back in the three-quarter line. This undoubtedly put Guy's off their stroke in the opening minutes of the game, and it was not surprising to find the Hospital changing their policy and adopting the same tactics. Durr was taken out of the pack and even then our pack secured the ball with the utmost regularity.

Eustace was provided with numerous opportunities to open up the game but, although quick in getting the ball away, his passes at times were erratic and, as a result, many opportunities were lost. Still, taking things all round, he performed creditably and should improve with more experience and a better understanding with his partner.

It was as well for Guy's that Preen was in such excellent form. He gave a first-class exhibition, his kicking and tackling being particularly good. His backs were given numerous opportunities, which were wasted through bad passes, or movements which were so stereotyped that the opposition had no difficulty in anticipating the course of attack.

For the first twenty minutes Guy's kept up a hot attack, but failed to penetrate an excellent defence. At last our visitors broke away to our 25, and Guy's were immediately penalised for feet up. Pearce took the kick, from near the touch line, and cleverly steered the ball between the posts.

Prior to this Guy's were awarded two penalty kicks and, although near the centre line, Durr only just missed scoring on each occasion. Guy's nearly scored when Wenham, the Old Blues right wing, threw an erratic pass to his full back, who missed, but quickly recovered.

Soon after Ryan stopped a forward rush and found touch with a splendid kick. Spence then attempted to break through on his own, but was collared and brought down. A fine round of passing between Preen, Ryan and Robinson was cleverly intercepted by Wales, who made straight for the line at a great pace. He was thrown into touch near our right corner flag, but the resulting scrum nearly spelt danger to Guy's. The ball was thrown in and secured by the visitors' scrum half—our men thinking the ball had not gone in stood still, waiting for the whistle to blow. Luckily, Johnson realised the situation and grounded his man on the line.

Immediately on resuming Johnson was penalised for holding the ball and Pearce nearly scored another goal. The Old Blues were then driven back and offside against our visitors enabled Durr to try another drop at goal, which went just wide of the post.

Preen, Ryan and Spence fielded well and were responsible for some good kicking, finding touch with well-directed shots.

After keeping up the pressure for the bulk of the second half Spence, although surrounded by opponents, dropped a wonderful goal and gave Guy's the lead, which they well deserved.

This was five minutes from time, and for the remainder of the game the Old Blues went all out to regain their lead. Our backs were equal to all demands and defended splendidly. Eventually no-side sounded and Guy's ran out worthy winners by a dropped goal (4 points) to a penalty goal (3 points).

Guy's Team—A. G. Johnson; T. G. Robinson, D. F. Ryan, F. H. B. Spence, A. J. D. Lewis; R. J. Eustace, V. R. Preen; J. R. Popplewell, J. Durr, W. H. Myburgh, B. G. Scholefield, J. H. Cullinan, C. D. Malone, T. Morgan, A. Simpson-Smith.

Guy's "A,, v. Bedford Thursday.

PLAYED at Bedford on October 27th, the game resulted in a win for Guy's by 8 points to 3. Thanks to some hard work in the tight scrums, particularly in the second row, the Hospital backs were given plenty of opportunities. Unfortunately, they missed many real openings by failure to hold a slippery ball. Their tackling was however good throughout a hard and fast game. The chief weakness of the Guy's forwards was in the loose scrums, and it was from one of these that the Bedford back broke away to score towards the end of the first half. Before this Spence had cut through and passed to Littledale, who got over far out. The kick failed.

Bedford replied with an unconverted try after a long dribble down the touch line. The second half was a hard forward struggle, in which the Hospital had much the best of the game. Many

promising movements only just failed until Clegg broke through and ran well to score himself under the posts. Freeman converted.

No further score was added, but there is no doubt that a larger margin would have indicated better the run of the play.

Guy's Team—A. G. Johnson; C. W. Harrison, F. H. B. Spence, E. S. Littledale, E. M. Harding; W. B. Clegg, R. J. Eustace; J. C. T. Tregarthen, A Simpson-Smith, L. Brown, R. A. P. Hogbin, G. Lashmore, L. Hilton, M. A. Freeman, A. R. Clarke.

Fencing.

Guy's v. Lucas Tooth Instructors.

ON Wednesday, October 19th, the Hospital Team met the Instructors of the Lucas Tooth Boys' Club in a match with three weapons. The result was the best we have had against them, mainly owing to the good play by H. N. Garrus. As this was the first match of the season, the team showed a lack of training that should soon be lost.

Result—Lucas Tooth Instructors 12 losses; Guy's 15 losses.

	Guy's	
Foil—	*Won*	*Lost*
E. L. Monkhouse	2	1
H. N. Garrus	2	1
T. B. Pitts	2	1
Epee—		
E. L. Monkhouse	2	1
T. B. Pitts	1	2
J. F. Morris	1	2
Sabre—		
H. N. Garrus	1	2
C. H. Johnson	0	3
J. F. Morris	1	2

Guy's v. R.N.C. Greenwich.

ON Thursday, October 20th, the R.N.C., Greenwich, came to the Gymnasium and beat us severely in epée, the team collapsing in an extraordinary fashion. In foil and sabre Garrus again proved invaluable.

Result—R.N.C., Greenwich, 21 losses; Guy's, 27 losses.

	Guy's	
Foil—	*Won*	*Lost*
C. H. Johnson	3	1
H. N. Garrus	4	0
E. L. Monkhouse	1	3
T. B. Pitts	0	4
Epee—		
T. B. Pitts	0	4
E. L. Monkhouse	1	3
J. F. Morris	1	3
C. H. Johnson	2	2
Sabre—	*Won*	*Lost*
H. N. Garrus	3	1
C. H. Johnson	3	1
J. F. Morris	0	4
E. L. Monkhouse	3	1

Guy's v. H. A. C.

ON Tuesday, October 25th, the Hospital beat the H.A.C. in a two weapon match. This is the first time—at least in the last four years—that our opponents have gone away defeated.

Result—H.A.C., 17 losses; Guy's, 15 losses.

Foil—	*Won*	*Lost*
E. L. Monkhouse	2	2
H. N. Garrus	4	0
T. B. Pitts	1	3
C. H. Johnson	2	2
Epee—		
E. L. Monkhouse	2	2
H. N. Garrus	3	1
T. B. Pitts	2	2
C. H. Johnson	1	3

Sailing Club.

AN innovation this year is the presentation, by Mrs. Ogilvie, of a magnificent Challenge Cup for single handed sailing within the Guy's Hospital Sailing Club.

The Competition was held on Saturday, the 29th October, at Fambridge, and we were fortunate in securing all the dinghies for ourselves. The weather was exceedingly kind to us. There were 13 entries, but unfortunately no less than five scratched at the last moment. Mr. Ogilvie, one of the Vice-Commodores of the Club, came down and competed.

A heat was sailed on Saturday which resulted in Wood and G. B. Palmer passing into the final, and a heat on Sunday morning caused Mr. Ogilvie and Roche to do likewise. This race was notable for the remarkable sailing of Mr. Ogilvie, who, though new to the boats—he had had but ten minutes' practice—won the race with a wide margin.

The final was decided by sailing four races, each competitor changing his boat at the end of a race, and points being awarded for places.

The results were as follows:—

Race 1—
1st, Wood; 2nd, Mr. Ogilvie; 3rd, Roche; 4th, G. B. Palmer.

Race 2—
1st, Mr. Ogilvie; 2nd, Wood; 3rd, Roche; 4th, Palmer.

Race 3—
1st, Roche; 2nd, Mr. Ogilvie; 3rd, Wood 4th, Palmer.

Race 4—

1st, Roche; 2nd, Mr. Ogilvie; 3rd, Wood; 4th, Palmer.

In points :—

1st	Mr. Ogilvie	13	points
2nd	Roche	12	„
3rd	Wood	11	„
4th	G. B. Palmer	4	„

Mr. Ogilvie is therefore the first winner of the Cup, and we should like to congratulate him on his splendid sailing.

The finals were all extremely good and close races.

Mrs. Ogilvie herself came down to watch the racing and give encouragement where, as events showed, it was least needed !

Inter-Hospital Regatta—Re-Sail.

THE re-sail of the Final of the Inter-Hospitals Regatta took place at Fambridge on October 15th and 16th, London, Bart.'s and Guy's each sending a crew of two.

In the first of the three races, with a very light wind, Guy's were first across the finishing line, with Bart.'s and London following in that order. This order had been maintained throughout the race, Guy's lead being gradually increased, whilst London had difficulty in finishing at all owing to the wind dropping and a stiff adverse tide.

The second race, held next day, showed a much better start, London being first over the starting line, followed by Bart.'s, with Guy's third. On the beat up to the first buoy Guy's passed Bart.'s, but London won by a comfortable margin.

The third race provided some excellent sailing. London were first over the starting line, ahead of Guy's and Bart.'s—who were recalled—were last. London rounded the first mark a few lengths ahead of Guy's, with Bart.'s still last, and here Roche showed great cunning, for by keeping out of the tide, although it meant covering a far greater distance, he was able to make the next mark half a length ahead of Bart.'s, London now being last.

Bart's were close on our stern till near the finish, when, by getting the better of a luffing match, they beat Guy's by a small margin.

Results

Guy's (Roche and Palmer)—One 1st, and two 2nd's, 12 points.

Bart.'s—One 1st, a 2nd and a 3rd, 10 points.

London—One 1st and two 3rd's, 8 points.

Thus, the Sherren Cup comes to Guy's. This is the first time we have held it since it was presented in 1925.

Previous winners have been :—

1925, St. Thomas's.
1926, St. George's.

G. NESBITT WOOD, *Hon. Sec.*

Hospital Information, etc.

Pass List.

Society of Apothecaries of London.

October, 1927

S. Slotar passed in Medicine and has completed the Examination

L.D.S.

September, 1927

1st Professional Examination.

PART I

Dental Mechanics

B. Deggatts
W. J. Woolley
W. H. Dodd
A. M. Garman
O. Lyth
E. A. Mayston
G. B. Palmer
H. M. Selmann
R. W. Stevens
R. G. Wheetley
W. R. J. Wood
C. J. Woodcock
S. Williams
R. G. Baker
W. D. P. Evans
E. S. T. Lee
J. C. McNeill
C. A. Palk
T. W. E. Pugh
W. H. H. R. Smithurst
A. G. Taylor
R. E. Wiles
I. C. Wilson
A. J. D. Gibbings

PART III

Dental Metallurgy

W. J. Woolley
J. J. Cochrane
L. D. Dale
M. A. Freeman
L. B. Hilton
J. E. Ilott
H. S. Johnson
R. E. R. Palmer
F. H. C. Beskett
J. R. Cohen
G. M. Davies
J. H. B. Gaffney
S. C. Holms
C. V. Harries
L. Mortimer
K. E. Pringle
C. P. B. Reed
J. A. Sidebotham
N. G. Straschun
I. A. Sicklemore
C. R. K. Smith

PART III (*a*)

Anatomy and Physiology

L. Ashling
D. B. Bergh
H. D. Cockram
I. C. Fisher
O. Lyth
E. A. Mayston
K. W. Whitworth
J. J. Cochrane
N. L. Barber
E. G. W. Brown
G. R. G. Druce
C. H. Hole
M. McDowell
R. W. Stevens
S. C. S. Brown

PART III (*b*)

Dental Anatomy and Physiology

D. E. C. Robertson
J. G. T. Edmonds
H. S. Gare
C. L. Knight
F. B. W. Sexton
C. J. C. Siggers
W. J. Watson
A. L. Wraight
D. S. Clogg
W. Foster
F. R. Kearsley
C. E. W. Kurtz
P. R. Shepherd
F. H. B. Spence
G. H. Weir

Births.

WEBB—On July 18th, 1927, at Portmore, Simla, to Constance Elizabeth, wife of Eric R. Webb, L.R.C.P., M.R.C.S.—a son.

FOX—On October 25th, 1927, at 157, Jamaica Road, Bermondsey, to Dr. & Mrs. Fox (nee York), twin boys.

EDS. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *November 19th, 1927.* *Number 1026*

PASSIM

PROBABLY there are not many of us who would pause to analyse the impulse that leads us each year to the Memorial Arch on the morning of Armistice Day. Whatever our philosophy or feelings it seems so unquestionably the right thing to set aside all and gather together during the Silence of Remembrance. In this way we are able to pay some small tribute to the memory of those Guy's men before us who so unselfishly laid down their lives in a noble cause.

The ceremony on last Friday morning was one of the most impressive we have witnessed. Prepared for the human imperfection which must creep into all things we need have had no misgivings. A few words on Guy's tradition from the Dean, the placing of the wreath, a short prayer and the sounding of the *Last Post* led up to a silence unbroken as in former years by vandal traffic in the Maze Pond or the noise of an errant train at London Bridge. We thought during those two minutes of many things. Almost unconsciously we read the names carved on the pillars of the Arch whose newness is now fast fading into the greyness of the older Guy's. Many of these names seemed familiar ; they are found among the fellows of the present time. Evidently the Guy's tradition is a really living thing, carried on from generation to generation, and no mere trite subject of a funeral oration. Our attention wandered to the little crowd of Borough people clustered outside the gate. A crowd typical of the people we have come to associate so closely with the Hospital and its work, of the people whose qualities and failings we know so well. Some of them, we thought, may have been helped into this strange world by those among the fallen who had reached the extern stage before departure on the great adventure. For them the debt may thus have been greater than they knew. A score of things flashed through our mind. How queerly the post-war world, and in particular post-war Europe, had settled down. How Science, and in particular Medical Science, was helping to establish that peace among nations which seems to be our only salvation. An ex-enemy professor had lectured in honour of the centenary of a famous Guy's man. Here there was no betrayal of those whose names stood carved on the stone before us, but rather a step of which they in their sacrifice would approve as leading to better things, as a help towards the understanding that can come only with the free interchange of knowledge between those of different tongues. In contrast there were darker, meaner things. We thought of the warlike pact between ex-Allies, of the building of yet larger and more powerful warships, of the many signs of a slipping back to the older evils and the vain loss of so much young life. Meanest of all, in our own country a newspaper stunt is made out of a ban on the broadcasting of the Cenotaph Ceremony.

Outside the gates a poorly-clad mother hushed the restlessness of her young child that threatened to break the silence, but inside emotional hypnosis had set up a strain that few could bear in comfort. Most of us had a lump in the throat, there were tears in the eyes of many of the women ; in a few cases true sorrow passed into the loud sobbing of hysteria, so that the maroon report that signalled the end was not unwelcome. Almost at once the bugler sounded *Reveille*, and rapidly the little crowd melted away.

▭

As items in the Agenda of the recent Residents' Meeting we noticed (*a*) Nigger, and (*b*) Play Evidently things are stirring, and those hours

which succeed the riotous dinner with which the worthy resident seeks to dispel the dignity of the day are to be crammed to overflowing. May we offer our best wishes for a successful outcome of so much hard work.

UNDER the auspices of the Hospital Ladies' Association, and with the kind permission of the Governors two Cinderella Dances are to be held in the Court Room on Wednesday and Thursday, November 23rd and 24th. Particulars as to times and tickets may be had from the notices that are to be a prominent feature of the Colonnade, Park and College.

So Gower Street and the Strand have had it out to the eminent satisfaction of several gentlemen in Covent Garden Market. We understand that several people got wet, that others sustained black eyes owing to insufficiency of decay in the vegetable matter used as ammunition, and that on the whole Reginald remained unavenged. No doubt, should the luck of the draw be with us when Cup Tie time comes along, the dissecting room will have the opportunity of showing the Strand men how to tackle the Highlander—namely, on neutral soil.

WE reprint below an item from the Personal Column in the *Daily Telegraph* of November 9th, 1927 :—

> No. 18, Job Ward, Guy's Hospital, desires to express his gratitude to the surgeons who operated on him on April 8th last, and also to the medical and nursing staffs for their kindness and skill. The surgeons and physicians at Guy's are doing wonderful work for afflicted humanity, and deserve the utmost public support.

We feel that other comment is superfluous except that we shall keep this little testimonial handy in case we meet a loose philanthropist anywhere in the near future.

WE have been asked to draw the attention of our readers to a Fund which is being raised in memory of the late Dr. Henry William Evans. We publish, in this number, a short Obituary, and also a letter concerning this appeal, and we feel that there must be many of his former colleagues who would like to commemorate him by sending a small subscription. This Memorial Fund is being organised for the benefit of his widow and children, who have been left in very straitened circumstances.

WITH the renewal of activities by the Niggers, whose somewhat doubtful harmonies can be heard in the evenings issuing from the Residents' Room, our thoughts naturally turn to the festive season of Christmas. One of the largest functions of that time is the Landon "Tea Fund," at which some 700 Borough girls and boys, all under the age of 14 years, are entertained at Out-Patients on the afternoon of Christmas Day. Each child is presented with a gift, and Sister Out-Patients has asked us to appeal for gifts, either in money or in kind, with which to decorate the two Christmas Trees, which are a feature of the afternoon. Toys, and *especially dolls*, are required, and may be sent to Sister Out-Patients, The Out-Patient Department, Guy's Hospital, S.E.1.

THERE is every prospect of a "Full House" for the performance at the Scala Theatre of *The Adventure of Lady Ursula* on Monday, November 28th, but there are still a few seats available, and early application to The Appeal Office, Guy's Hospital, is advisable.

THE closing date for joining the "Help Yourself" Society is officially fixed for November 25th.

We hear that there has been an excellent response to the circular in last month's issue of the GAZETTE, and there are still a few days in which our readers and their friends can join by contributing 2*s.* 6*d.* to the Hospital and, at the same time, have a free chance of winning one of the motor cars or other of the 1,600 prizes.

Speciality.

MESSRS. A. WANDER, LTD., 184, Queen's Gate, London, S.W.7.

AT the present time great attention is being drawn *to the just balance of food and the nourishment* it affords in building up and sustaining strength.

Ovaltine can be recommended as fulfilling these requirements, and is, in addition, pleasant to the taste.

The news of a reduction in its price is, therefore, welcome, and should lead to a much larger consumption than formerly, as the quantity and quality of the contents of the tins remain precisely the same. The alterations in price are as follows :—

1*s.* 6*d.* size, now 1*s.* 3*d.* per tin.
2*s.* 6*d.* size, now 2*s.* per tin.
4*s.* 6*d.* size, now 3*s.* 9*d.* per tin.

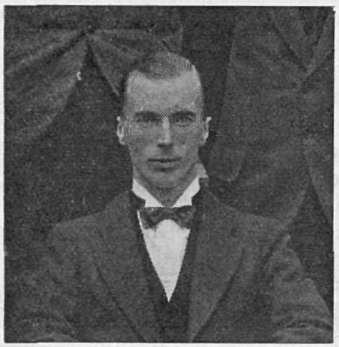
Guy's Hospital Gazette.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Obituary.

Henry William Evans.

DR. HENRY WILLIAM EVANS, who died on October 25th of pneumonia at the early age of 37, qualified as M.R.C.S., L.R.C.P. in 1913, having received his medical training at



Guy's Hospital. In the following year he graduated as M.B., B.S.(Lond.) and, at the outbreak of war, he obtained a commission in the R.A.M.C., being sent to France in 1915. Before being invalided home in 1917, he was awarded the Military Cross for gallant conduct and devotion to duty when he was isolated with his ambulance company for two days, while serving on the Somme. During the latter part of the war he served in Egypt and Palestine, being present when Allenby entered Jerusalem. He returned to Guy's in 1920, being appointed Resident Obstetrician to Mr. Bellingham Smith. In that year he obtained his M.D. In 1921 he married and settled at Reedham, in Norfolk, removing to Brundall in 1923.

To those who knew him at Guy's, Henry Evans will be remembered as a man endowed with many rare qualities. In his work he was not only brilliant, he was essentially sound. He was a man of wide interests, and took even more pleasure in literature than in sport, in which he excelled. He was gifted with sympathy tempered by a keen sense of humour, and was deeply loved by all who knew him, winning the affection and confidence of his many patients, both rich and poor alike.

He leaves a widow with two young children.

Sleep and the Treatment of its Disorders.

A Clinical Lecture by R. D. Gillespie, M.D.

GENTLEMEN,—There are several distinct topics of considerable practical and theoretical interest connected with sleep. They are, principally, as follows:—

(1) The nature of sleep;
(2) The effects of sleeplessness;
(3) The causes of sleeplessness and the methods of treatment;
(4) The effects of hypnotic drugs and the indications for their use.

They will be dealt with in that order.

(1) *The Nature of Sleep*—

This has always been something of a mystery. Biologically, sleep may be described as a rhythmic recuperative autonomous function, characterised by absence of spontaneous activity, mental and physical (except in the vegetative systems) and by a raising of the threshold for sensory stimuli. The kind of explanation that is usually sought, however, is a physiological or perhaps more simply a physio-chemical account of the phenomena which this description succinctly covers. Such a physiological statement should tell us not only what bodily conditions accompany sleep, but what determines its occurrence and its periodicity, and what neutral changes are responsible for the muscular flaccidity and the raising of the sensory threshold. Of these, the most readily determinable are the *bodily changes accompanying sleep.* In normal sleep the heart is slowed and the peripheral blood vessels are dilated—therefore the blood-pressure falls. It has consequently been assumed that there is a relative anæmia of the brain produced by a "rhythmic fatigue of the vasomotor centre." This supposed cerebral anæmia has been regarded by Howell and others as the essential determinant of sleep. But, in fact, sleep can occur when there is no diminution in the cerebral blood supply, and the vasomotor theory has now been discarded. In addition to the vascular changes,

respiration is slower and less deep, and the alveolar CO_2 concentration is increased, the respiratory centre being apparently less sensitive to H-ion concentration during sleep. The output of CO_2 and the absorption of O_2 diminish, the former more than the latter, so that the RQ falls in value. The secretion of urine and its total chloride, urea, uric acid and creatinin are diminished—the quantity of urine probably because of the lowered blood-pressure and the creatinin presumably because of the cessation of static—postural—activity. Heat production being diminished, the temperature of the body falls, although the surface temperature may rise—from peripheral dilatation.

But these are not the characteristic marks of sleep, for they occur in repose and in recumbency minus sleep, being bodily functions which show a diurnal curve of activity independently of whether the subject sleeps or not. Thus, sleep during the daytime does not show the majority of these changes.

The *sensory and motor phenomena* are more intimately and constantly bound up with sleep than the bodily accompaniments. These sensory and motor signs are muscular flaccidity and immobility, raising of the threshold for stimuli, and the absence of spontaneous reactivity, together with the capacity for rapid abolition of all these things, either spontaneously or in response to a sufficiently intense stimulus. The underlying neural condition we shall return to later; at present our concern is with what determines the periodic recurrence of the phenomena every 24 hours.

It is remarkable how few of those who have speculated on the nature of sleep have emphasised its occurrence at night. Sleep is an adaptive function, and can be fully understood only in reference to the environment, and not by the consideration of neural changes alone. Darkness deprives the organism of a large field of stimulation, not only of visual stimulation but of all other kinds, since practically all forms of life are less active at night—hence, in primitive times, less vigilance was exercised at night than in the daytime. It is, therefore, likely that from very early times there occurred a rhythmic reduction of activity, especially of adaptive activity, which is essentially neural. Perhaps what accounts for the absence of convincing evidence of sleep in fishes is that the alternation of darkness and light does not occur to any extent with them. One can see also that the organism would be enabled to work at a higher potential during the day by reason of the opportunity for restoration at night. It is surely a significant fact that the lowest organisms show no alternation of activity and rest. Plants show no phenomena that could be regarded as homologous with the sleep of animals. The ciliary movements of lowly organisms like vorticella show no interruption of activity. Among some insects — the orthoptera — Piéron failed to discover periods of diminished excitability. But, as the animal scale is ascended, sleep becomes a more and more obtrusive occurrence. A higher rung on the animal scale means, as a rule, an increased complexity of neural organisation. Complex neural organisations, as is well known, are more easily disorganised than simple ones. It seems likely that the nervous system of man could not have been evolved to its present level of intricate complexity unless a periodic restoration of energy reserve and of other cellular conditions had been possible. This does not mean that sleep is determined simply by the recurrence of fatigue. The stimulus of fatigue *may* originally have been the adequate stimulus to sleep, but that is at least doubtful. It is more likely that sleep and fatigue are independent phenomena, which became associated in a secondary manner, partly as a biological result of the condition above indicated, and partly through the intermediary of rest: for fatigue is the adequate stimulus to rest, and rest, in favourable conditions, and even apart from fatigue, leads, as everyone knows, to sleep. That complete rest, such as is only attainable in the recumbent position, with its resulting muscular relaxation, is an adequate stimulus to sleep is shown not only by the nightly practice of all of us, but by the more novel experience of certain experimenters. Kleitmann, for example, in the course of his work with subjects who had volunteered to deprive themselves of sleep for as much as 90 hours, found that it was fatal to the experiment to allow the subjects to lie down—if permitted to do so they fell asleep at once.

Fatigue is only one of a number of conditions tending to induce a state of rest. The mere absence of stimuli—such as occurs in darkness and silence—implies rest of the sensory nervous mechanism, and may in itself be sufficient to bring sleep to pass. Pflüger's famous anæsthetic boy—who for some anatomico-pathological reason had no common sensation and was deprived of the use of all his sense organs except one eye and one ear—used to fall asleep at any time of the day immediately his only eye was covered. Dickens' less well-authenticated fat boy is another instance, although here the ready onset of sleep depended less on poverty of sensory stimuli than on a singularly placid neural organisation, with a cortex whose receptivity was in inverse proportion to that of his stomach—which doubtless contributed to the general effect by its constant circulatory repletion.

Furthermore, we can sleep when we are not tired, and cannot sleep if we are very tired. The

latter is a commonplace observation, which, however, was confirmed by Piéron in his experiments in over-fatigued dogs. We have therefore two processes evolving together fatigue and sleep, both calculated to bring about a restoration of the organism, the one by inducing to rest, the other following upon rest. Sleep might be described as the completest state of rest—so complete that conscious, neural and muscular activity are alike abolished. But there is not a direct continuity from rest to sleep. Sleep usually begins more or less suddenly, and it is accompanied by an entirely characteristic rise in the sensory threshold, quite foreign to the state of mere rest, and by a degree of muscular relaxation only attained otherwise in such conditions as deep narcosis. Sleep is in fact a positive process, with characteristics of its own, discontinuous with those of mere rest. What is this positive process? Inhibition as a local neural process is now well recognised. Pawlow's experiments on conditioned reflexes in animals strongly suggest that sleep is simply a widespread inhibition, involving the cerebral cortex, and produced in a manner precisely similar to that in which local inhibitions are induced in his experimental dogs. In fact, Pawlow found that so apt was sleep to occur in them during his experiments that it proved time and again to be a serious interfering factor. Pawlow say that "the fundamental condition of the appearance and development of internal inhibition—inhibition of one part of the cortex induced by the activity of another part—and of sleep is exactly the same." He showed that the prolonged or the repeated action of a conditioned stimulus—stimulus originally indifferent which has become effective in producing a response by association with another, natively effective, stimulus—leads inevitably to drowsiness. Now, on other grounds it is known that such prolonged or repeated action of some cortical elements leads to an inhibition of neighbouring cortical elements—internal inhibition. It is the general spread of this internal inhibition over the remainder of the cortex that expresses itself externally as sleep. Similarly the development of a conditioned response to one musical tone as distinct from all others involves an inhibition of response where any other tone is being sounded. It is found that during training of this differential kind, the animal is very apt to fall asleep—from the spread of the continued inhibition of the response to the sole effective tone (a response which if it were not inhibited would take place on any occasion when a sufficiently similar tone was sounded). There are certain important consequences which follow from this identification of sleep with generalised internal inhibition. In the first place, internal inhibition of any kind develops as "a conditioned reflex," obeying the same laws as other conditioned reflexes. Now, Pawlow's fundamental discovery is that there is practically no stimulus of whatever kind or strength that cannot become associated by training with any given response, whether it is an overt response or an internal inhibition. Consequently, even powerful and therefore painful electric shocks applied to the skin can in time be converted into an adequate stimulus to sleep—a paradoxical result surely. It follows also that sleep becomes a multi-conditioned response—any one, or any congeries, of a number of conditions can by repetition become the effective stimulus to sleep. Hence, probably the effect of familiar surroundings —*e.g.*, of the usual bedroom and its arrangements—and hence also in part the disturbing effect with many people of an unfamiliar lodging for the night.

It follows, if Pawlow's conclusions be accepted, that the physiological basis of sleep is nothing more or less than that of the pervasive and extremely important function of neural inhibition. Inhibition itself is still a mystery as far as its physio-chemical conditions are concerned, but there are some facts which may be tentatively discussed regarding the *microchemical changes that may be involved in sleep*—always remembering that speculations in calcium metabolism are highly adventurous.

It has been claimed that during sleep there is a diminution in the calcium-ion concentration in the peripheral blood, and a complemental increase of calcium-ions at the base of the brain has been assumed. Working on this hypothesis, and remembering that subthalamic lesions are especially apt to be associated with disorders of sleep, Demole injected a dilute solution of $CaCl_2$ into the subthalamic region of a cat. An apparently natural sleep of as much as four hours—according to the dose—ensued. This result was lacking if the injection were made into any other part of the brain or if potassium were substituted for calcium. In the latter instance the cat "miaule and semble éprouver un certain désagrément de l'opération qu'il vient de subir."

These results have to be regarded with the greatest reserve. As Professor C. S. Gibson has pointed out to me, the margin of experimental error in the serum-analysis was wider than the differences found. Moreover, there seems to be an inherent improbability that the subthalamic region should play more than a subordinate role in sleep. Yet I have some clinical evidence to submit which points a little in the direction suggested by the experiments to which I have alluded.

The first case is that of a lad of 21 who had an attack of so-called influenza in January, 1926.

Since then he has slept badly, but there have also been brief episodes when he "seems to forget his surroundings" and "loses all knowledge of where he is." Objectively, there are some impressive phenomena. He has a fairly typical Parkinsonian facies and bodily attitude, but what is of special interest is that he has periods of hyperpnœa, followed by apnœa, and that from the beginning of the apnœic periods there frequently occur symmetrical spasmodic contractions of the facial muscles—so that his eyes are half-closed—and of his fingers, which assume the position of the "main d'accoucheur." In other words, in the apnœic periods following the spasmodic over-ventilation—which is apparently involuntary—he has the muscular spasms of tetany, produced by the alkalosis resulting from the hyper-ventilation. Now, the alkalosis of hypernœa is associated with a diminution in the free ionic calcium. This chronic encephalitic patient therefore has a basal —presumably subthalamic—lesion, with a nocturnal sleep disturbance, with brief episodes of unconsciousness, and with a paroxysmal respiratory disturbance leading to a periodic decrease in the calcium-ion concentration of the serum and to manifestations of tetany.

In another group of chronic encephalitics there are periodic losses of consciousness of longer duration. These episodes so closely resemble sleep that the condition has been labelled "narcolepsy." A typical case is that of a woman of 25 who had "influenza" three years ago, and has ever since had a tendency to drowsiness. Sometimes she falls asleep in the middle of a conversation. Her drowsiness is worse after midday, when she has great difficulty in keeping awake at all. If she tries to resist the tendency it is notable that she "sees double." It is also noteworthy that the only method by which she can assure herself of keeping awake is by moving about continuously. She is a domestic servant and has lost numerous jobs from her habit of falling asleep while she is at work. Her illness distresses her greatly and she is very desirous of being fit for work again. Caffeine in considerable doses—gr. v per day in divided doses—has had some effect in diminishing the drowsiness. There are no organic signs of disease. Now, it has been observed that in narcoleptic patients of this kind, in whom the history of epidemic encephalitis has been fairly clear, voluntary over-breathing readily induces an "attack" of sleep. It is said that even in normal persons a condition similar to sleep can be induced by sufficient hyper-ventilation. In chronic encephalitis therefore in which the essential lesion appears to be in the subthalamic structures, and which is notoriously accompanied by sleep disturbances, both in the direction of increase and in the direction of decrease of sleep, changes in the calcium concentration in the blood may occur, producing in some patients tetany and in others narcoleptic attacks.

The question next arises, How could the change in calcium concentration be supposed to act? We know that calcium has an important influence on cell-membranes. It is tempting to suppose that in sleep, which from the raising of the sensory threshold might be supposed to be associated with decrease in membrane-permeability, the latter might in some way be associated with the change in calcium concentration. Decrease in permeability of the cell-membrane means a decrease in electrical conductivity between each side of the membrane. Experiments with a string-galvanometer have shown—according to Richter—that there is an increase in the electrical resistance of the body generally during sleep. These results have been called in question by Landis, but if they be valid then "sleep and his brother death" are less akin than the poets and people in general believe, for death is the opposite state of complete membrane-permeability.

It is possible also that the sleep disturbance in subthalamic lesions is sometimes related to the role of the subthalamic region in controlling muscular tone—a decrease in the latter being, as we have seen, an important pre-condition of sleep.

Theories of the mechanism of sleep other than the inhibitory theory hardly repay attention, and they are all at present discredited. The principal varieties were those based respectively on the hypothesis of expansion and retraction of the dendrites, on the supposed presence of a "hypnotoxin," or of a fatigue toxin, and on a hypothetical dehydrated state of the brain in sleep.

Hypnosis—

Some reference to the nature of hypnosis is desirable, not only because it seems sometimes to resemble sleep so closely, but because Pawlow has attempted to bring it into line with normal sleep by assuming that in hypnosis the essential physiological condition is an inhibition only less generalised than that obtaining in ordinary sleep. Hypnosis is, in fact, he says, a *local* sleep. Moreover, hypnotism has been used as a method of treatment for insomnia. For example, Schultz records a case of a woman of 60 who had taken veronal nightly for 32 years—gr. x to xv per day—and whose ability to sleep normally was restored after sleep had been induced by hypnosis on eight occasions only.

Although Pawlow produces some interesting illustrations of conditions resembling hypnosis in his experimental dogs, his theory of hypnosis is

difficult to accept on clinical grounds. The clinical resemblance between hypnosis and normal sleep is actually very slight. In the first place, hypnosis involves a relationship between subject and hypnotiser of a special kind—" rapport." Secondly, what is much more important, it seems to me that hypnotic states are as much dependent on the patient's mental concepts as any hysterical symptom is. The usual hypnotic command, expressed or implied, is to " go to sleep," and the patient proceeds obediently to reproduce as closely as he can the phenomena of normal sleep —closed eyes, muscular relaxation, etc. The other hypnotic phenomena—anæsthesia, etc.—are likewise the result of the operator's suggestions, and are added at his behest via the patient's mind ; they are not part of a spreading process of inhibition, but are isolated phenomena produced and removed as the operator suggests. Moreover, the dramatic episodes so often recounted under hypnosis are entirely different from most dreams in their structure—they are present in the way that real events are coherent. For example, a hysterical patient of mine when hypnotised would recapitulate in apparent exact detail conversations that had occurred 25 years before, and would live over again the emotional experiences associated with them. Finally, the patient's subjective experience in hypnosis is not at all the same as that of a person in sleep or about to sleep. The hysterical patient just mentioned said that while entering a hypnotic state she had a feeling of " gradual shrinking till only a small part of her was left." Her limbs and her body seemed to disappear from her experience, and all that was left was a small part of " herself "—her mental content at the moment presumably. Another patient said of his condition during hypnosis : " I could hear, I could think, but thought did not convey anything to me. I could not move my limbs, they felt as if paralysed."

(2) *The Effects of Sleeplessness*—

This is a very important topic for several reasons. Patients commonly believe the effects of insomnia to be calamitous—insanity is nearly always dreaded by the sleepless neurotic, and even death itself suggests itself to him as a possible outcome of long-continued loss of sleep. Moreover, patients are encouraged in this belief not only by misleading newspaper reports of " suicide following insomnia," but also by certain medical teaching.

There is no doubt that complete deprivation of sleep in animals can be lethal. Young puppies, three or four months old, deprived of sleep for four or five days, died either at the end of that time or, if then allowed to sleep, after a few more days. The younger the animal the quicker its death. Capillary hæmorrhages were found in the brain at autopsy.

Rabbits kept continuously awake by compelling them to run in revolving cages can be fatigued to the point of collapse and death after periods varying with individual rabbits from seven to thirty-one days. The histological changes were a decrease in nuclear chromatin and chromatolysis, but affecting only the nucleus of the solitary tract, the dorsal vagus nucleus and the nucleus ambiguus. Neither the hypoglossal nucleus nor any of the motor nerve cells to the somatic musculature showed any abnormality. Crile described similar changes, also in rabbits, and in the cells of the liver and of the adrenal cortex as well.

It is accordingly evident that death can follow complete and prolonged deprivation of sleep in animals. It is a little dangerous to argue from animals to man ; dogs, for example, sleep proportionately longer but more lightly than humans.

There are two other important observations made by Crile. The first was that after prolonged continuous insomnia one period of sleep restored the brain-cells to a normal condition, except those in which the cell and nuclear membranes had ruptured. The second observation, which is not sufficiently known, was that the use of nitrous oxide for one hour out of every six during the period of insomnia, or the administration of opium, seemed to prevent or abolish the changes in the nerve-cells, even when the sleep that would naturally have followed the giving of these agents was prevented from taking place. Crile does not mention whether the usual hypnotic drugs were tried in this way also, but presumably they would have a similar effect, since, like nitrous oxide, they depend for their narcotic action on their lipoid solubility.

These facts, especially the last two, are to be considered in their probable relation to the effects of insomnia in man. A number of persons have from time to time volunteered to deprive themselves of sleep for as long as possible. The record for voluntary deprivation appears to be held by Kleitmann, who on one occasion deprived himself of sleep for 115 hours on end. There is, however, some evidence that he was not always widely awake during that time, and all of his fellow volunteers almost unavoidably dosed a little from time to time. Thus, after his fourth sleepless night, Kleitmann found that he performed simple tasks automatically while dreaming of something else.

The blood-sugar, alkaline reserve of the blood, hæmoglobin, red blood corpuscles, white corpuscles, body weight, B.M.R., creatinin and total

nitrogenous excretion, appetite and the ability to perform simple mental tests, like naming letters and doing mental arithmetic, showed no alteration. The respiration, pulse-rate and blood-pressure showed a decrease, mainly due to the muscular relaxation of the recumbent—sleepy—subject.

Patrick and Gilbert in their experiments found that at the end of 90 hours continuous insomnia a very small extra amount of sleep beyond the normal caused complete restoration, all the "symptoms" of insomnia—including a fall in body temperature and a slight paradoxical rise in weight—disappeared. Tests of mental efficiency during prolonged voluntary sleeplessness showed no falling off from the normal (Robinson). But it is difficult to eliminate the effect of interest. McDougall and Smith found that voluntary partial deprivation of sleep—the subject sleeping for one to three and a half hours a night—actually *increased* the mental efficiency as shown by a decrease in errors in placing pencil dots in circles on a revolving tape (dotting machine). Sleep on the basis of these experiments appears more and more as a luxury. The improvement in mental performance noted by McDougall and Smith was, however, followed—although the subject was now sleeping normally—by a period of diminished efficiency lasting 14 days.

Kleitmann observed two facts relevant to the conditioned reflex-inhibition theory of sleep. As noted above, it was fatal to the continuity of sleeplessness to allow the subject to lie down—the effect of muscular relaxation. Further, in the deep sleep following the conclusion of the experiment, the plantar response was extensor, which is what might be expected in profound cortical inhibition.

It is clear from these experiments that by no known method has it been possible so far to demonstrate any but trifling physical or mental changes after prolonged insomnia in man. The symptoms are almost entirely subjective, and they can be abolished after as much as 115 hours of insomnia by a single period of sleep not greatly prolonged.

On experimental grounds therefore it can be said that while continuous insomnia in animals can lead ultimately to death, in man the discernible effects, of such experiental insomnia as it has been possible to produce, are extraordinarily meagre. Clinically, it has not so far been my fortune, or, rather, misfortune, to observe any effect of insomnia of a serious kind. I have yet to see a patient whose mental disorder could fairly be attributed to sleeplessness. An important point arises here. When it is maintained that sleeplessness can produce mental illness, the cases that are instanced are usually cases of anxiety, or of schizophrenia, or one of the well-known "functional" syndromes. But if insomia were the *direct* cause of a psychosis, it could act only by virtue of the physical—nerve-cell—changes it is assumed to produce in man by analogy with the changes described in animals. A mental disorder thus arising would necessarily be of the organic type—delirium, followed perhaps by a permanent impairment of memory—and not of the "functional" variety at all. In point of fact, however, it is practically always the functional type of case that is adduced as evidence of the dangers of insomnia. Examples in the literature of acute organic reactions following insomnia are extraordinarily rare. Agostini records two cases of delirium with hallucinations following prolonged insomnia—one is a lady's maid who became nurse to her mistress in the latter's illness and allowed herself no sleep for nine days, and another is a mechanic who did not have an opportunity of sleeping for six. The latter recovered completely after a sleep of 15 hours. Meynert records a similar case in a woman who had continuously looked after her child—which was ill with pneumonia—with almost no sleep for 14 days. Such delirious states are the only relevant types of reaction in this connection, and there are very few cases on record, whereas insomnia is one of the commonest of symptoms. To say, of course, that sleeplessness aggravates an existing "functional" mental illness is a different matter, and can be true. (*to be continued*).

Guy's Hospital Biennial Dinner.

THE Biennial Dinner was held at the King Edward VII Room, Hotel Victoria, Northumberland Avenue, on Friday, November 4th, under the Presidency of Dr. John Fawcett.

The function was a very great success. Over 400 Guy's men were there, and these comprised men of all times and ages, and, as was natural among so large a gathering, everyone was sure to find one of his contemporaries, with whom to exchange reminiscences and experiences.

Judging from the scene in the Reception Room before the dinner, it seemed that everybody did do so. On every side old friends greeted each other in their different ways. There were the boisterous greetings of youth mingled with the courteous greetings of the old days. If anyone found himself alone for a few moments, which was an extremely rare occurrence, he would look around for someone who looked as if he ought to belong to his year and would hail him cordially

by some name or other, sometimes an entirely fictitious name it seemed. Such a pair would usually find they had something in common, so all was well. So great was the obvious enjoyment of some in the Reception Room that they seemed reluctant to move in to dinner.

Although the dinner was really a matter of quite secondary importance, on such an occasion, it was admittedly one of the highest excellence.

After the dinner the toasts were honoured, and, although speeches are barred at this function, the Treasurer of the Hospital, Mr. Whitbread, replying to the toast of the Hospital, said that he thought everything was right with the spirit of Guy's Hospital. He was not out to make a speech, for what was a speech? Did anyone there know what a speech was? He merely wished to say a few words about the Chairman. He—Dr. Fawcett—was a kind man, a considerate man, and he—Mr. Whitbread—would say it without hesitation. He therefore proposed the toast of the Chairman, John Fawcett.

This speech—for such it was—was received with much applause, and the response to the toast showed how much everyone liked having Dr. Fawcett for the Chairman.

Dr. Fawcett, in reply, thanked everyone and proposed the health of the Honorary Secretary, Mr. Hughes, to whose untiring energy the success of the evening was in no small measure due. This toast was received with much acclamation, and cries of "Speech!" and "Joey" were distinctly audible.

Mr. "Joey" Hughes replied in the briefest manner: "Mr. Chairman and Gentlemen, I thank you all," this being received with cries of "Speech" which was not, however, forthcoming. Following the honouring of the toasts, the scenes of the Reception Room were repeated, and quite a number of men were to be seen proudly introducing "their boy," sometimes a Guy's man of some years' standing and sometimes a man still doing his ward appointments, to their contemporaries.

But all good things come to an end, and this pleasant occasion had to fulfil this rule, and the numbers gradually dwindled until the last group left.

The success of the evening was chiefly due to the enormous amount of work which had been done by the Honorary Secretary in order to ensure a successful reunion, and the general appreciation of his work was shown by the enthusiastic response to his toast. It is evident that the "Biennial" will always be a success as long as Mr. Hughes holds the post of Honorary Secretary.

JOINT MEETING OF THE PHYSICAL & PHYSIOLOGICAL SOCIETIES.

Papers read on November 1st, 1927.

1.—The Physiology of the Lymphatic System.

By Mr. C. Keith Simpson.

MR. CHAIRMAN AND GENTLEMEN,—This Paper is intended to deal with the physiology of the lymphatic system. To digress therefore into further anatomical details than those concerning its histology would but render the subject both tedious and unnecessarily long for the present occasion.

General Anatomy—

The lymphatic system includes the tissue spaces, lymphatic vessels, lymph nodules, lymph and hæmolymph glands, and, in addition, the cavities of the serous membranes which are in open communication with the lymph vessels which run in their periphery. It is not proposed to consider the spleen and other hæmolymph glands in this paper.

In no tissues whatever other than the liver, spleen and probably bone marrow does the blood come in direct contact with the tissue cells. Minute spaces and channels, the tissue spaces, separate the two, containing the correct physiological medium for the various co-ordinate functions.

McCallum showed that the lymphatic system is closed very definitely with regard to these tissue spaces; I cannot stress too highly therefore the distinction between tissue fluid and lymph. They are not in continuity with each other, being shut off by the endothelial lining of the commencing lymph channels. Extraordinarily quick passage from one system to the other does occur, but the process is at present somewhat vague.

The lymph vessels of the pleural and peritoneum are, however, in direct communication with their respective cavities through stomata, those of the pleura occurring in the intercostal spaces, and of

the peritoneum on the central tendon of the diaphragm (*a*).

The vessels draining the small intestine receive the special designation of lacteals or "chyliferous vessels," differing, however, only in the respect that, subsequent to absorption of fatty foods, they contain a white, viscid, opalescent fluid—the chyle.

Development—

Klein, and later Retterer, described the lymphatic vessels as originating by vacuolation of mesenchymatous tissue cells. Gulland imagined them to be formed by the appearance of clefts in the connective tissue which subsequently established connection with the venous system. Ranvier, however, and more recently Miss Sabin, proved conclusively that lymphatic trunks grow out at certain places from the venous system and gradually spread from these parts to the periphery, abutting against the tissue spaces. This conforms admirably to the closed character of the peripheral lymphatic capillaries emphasised a few moments ago.

Downey (*b*) during recent researches with the pig showed that some lymph sinuses would still appear to originate by vacuolation, being lined by reticulum and forming a connection with the regular lymph channels secondarily.

Histology—

Lymphatics occur in all vascular tissues. Non-vascular structure such as cartilage and hair probably have none. Their origin is either plexiform or in the form of lacunar interstices.

Lymphatic channels are delicate transparent-walled vessels, constricted at intervals where valves occur in the interior.

The larger vessels are composed of three coats. The intima is composed of pavement endothelial cells elongated in the long axis of the vessel and dovetailed into contiguous cells by means of irregular margins. The media is composed of smooth muscular and fine elastic fibres disposed in a transverse direction. The adventitia consists of loose connective tissue containing a few longitudinally or obliquely set muscle fibres; it serves both to protect and attach the vessel.

Smaller vessels—the so-called lymph capillaries—may be bounded by nothing more than the endothelial intima.

The thoracic duct is more complex a structure. It presents a distinct subendothelial layer similar to that found in the arteries. The middle coat in addition has a layer of longitudinally disposed connective tissue.

Numerous non-myelinated nerve fibres ramify by means of the finest tendrils over the coats of the ducts, the larger of which receive in addition nutrient vessels.

Valves occur at frequent intervals, being most numerous near the lymph glands, especially in the neck and arms. They are absent in the cutaneous plexuses.

The valves are formed of fibrous and elastic tissue, disposed in strata and covered on both surfaces by pavement endothelium. The arrangement of the latter is different on both sides. On the surfaces of the valves next the wall of the vessel the cells are arranged transversely, whilst on the surface over which the lymph flows the cells are arranged in a longitudinal manner.

The valves are semi-lunar, being attached to the vessel wall by their convex edges. It is usual to find two valves of equal size opposite one another. This, however, is variable. The wall immediately distal to the valve is dilated, giving the vessel a knotted appearance.

The lymphatic glands are small oval bodies situated on the course of the lymphatic channels and presenting a slight depression—the hylum—on one side, through which blood vessels and the efferent lymphatic vessels pass. The afferent lymphatic vessel enters the gland over the periphery.

Macroscopically, the lymph gland shows a cortex and medulla, the former, denser and more vascular, being absent from the hylum.

Microscopically, it consists of a fibro-muscular capsule, from which project inwards irregular trabeculæ, imperfectly dividing the interior into spaces, which freely communicate. These spaces are incompletely filled by a quantity of lymphoid tissue, around and in which run blood capillaries. Lymph paths intervene between the pulp and trabeculæ, being bridged by a network of retiform tissue, which Sir Sharpey Schafer has recently shown to be continuous with the collagenous material in the capsule (*c*). The few nerves running into the hylum supply the blood vessels.

For the reason that the trabeculæ only pass in for one-third of the way from the capsule, the outer gland pulp is arranged in nodules—the "secondary" nodules—and the inner in rounded cords—the "medullary cords." The nodules constitute the cortex, and the medullary cords lie in the medulla.

The lymphoid tissue is ordinary retiform tissue packed with lymphocytes; many of the secondary nodules present a light spherical area, the germ centre of Flemming containing kariokynetic figures.

It will be seen then that the stream of lymph enters at the periphery—where the afferent vessels lose all but their endothelial coat—passes through the plexus of lymph paths of the cortex, where it is exposed to the action of the gland pulp, and drains through the vessels of the medulla. The

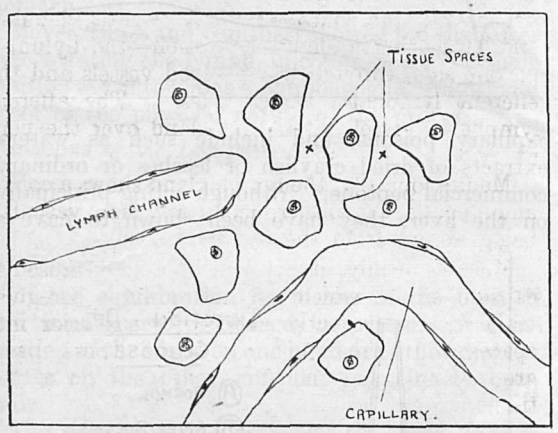
reticulum retards progress, and thus facilitates deposition of morphological elements, normal or morbid—an important point.

May I impress upon you that, in spite of certain evidence to the contrary, the lymphoid tissue of lymph glands—unlike the similar tissue of hæmo-lymph glands—appears to be in contact with lymph only; the blood vessels which enter the gland only supply the germ centres with oxygen. A separate supply to the capsule and trabeculæ is brought about by means of minute peripheral blood capillaries running over the capsule.

PHYSIOLOGY

General—

Throughout the spaces between the tissue elements a close network of tissue sinuses extends, abutting against the more definite channels—the lymphatics, by means of which excess of tissue fluid can be drained off.



Under conditions of rest the flow of lymph in the channels is almost nil. It is only after excessive exudation of lymph that flow becomes perceptible in order to avoid injury to the adjacent tissues.

Properties—

From a fasting animal the lymph is a transparent yellow liquid, occasionally tinged with red owing to the presence of red corpuscles.

From an animal shortly after a meal it is opaque and milky from the presence of fat particles. The basis of difference is the chyle from the lacteals of the small intestine.

Colourless corpuscles may be found in considerable numbers in the normal lymph, being products of the leucocytic factories in the lymph glands. Adenoid tissue in the tonsils, spleen, thymus and other localities assists the true lymph glands in this function.

In composition it resembles the plasma. Of specific gravity 1015, the liquid will clot after a variable period by production of fibrin. Six per cent. solid is present, the proteins consisting of fibrinogen, paraglobulin and serum albumin. The salts are similar to those of blood plasma and are present in the same proportions—a significant fact.

Production—

The theory that selective activity was exerted by the endothelial cells of the capillaries in secreting tissue fluid has long been abandoned for the theory that the process is one of complex physics—complex in view of the governing factors.

The latter may be classified as:—

(*a*) Mechanical;
(*b*) Chemical.

(*a*) *Mechanical—*

The production of tissue fluid would undoubtedly vary in direct proportion to the capillary pressure were it not that the capillaries of various tissues differ considerably in their permeability.

Whereas the capillary walls in the limbs and connective tissues generally present a very considerable resistance to the filtration of tissue fluid through them and keep back the major portion of the protein content, the intestinal capillaries are much more permeable, giving at moderate capillary pressures a continuous flow of fluid, and, in addition, separating a small proportion of protein. Still more so in the liver. A slight rise in capillary pressure suffices to produce great transudation of tissue fluid, containing nearly the plasmal proportion of protein. As much as eight times the normal flow is recorded.

The latter is explained as a result of the incompleteness of the endothelial lining of the liver capillaries.

It would appear then that in regions where the capillaries are fairly permeable the more important factor in lymph production is capillary pressure.

Freund[1] emphasised by arsenic poisoning that any injury to the limb capillaries or even conditions of excessive heat or cold will cause them to react just as the liver capillary. Exudation of fluid under such conditions may be so great as to defy removal, causing œdema or dropsy.

(*b*) *Chemical—*

As inferred, it is in the limbs and general connective tissues that the pressure factor assumes less and the chemical factor more prominence.

During normal physiological processes the capillary wall may not only permit of filtration under a rise of pressure, but also allow the passage of water and dissolved substances by osmosis and diffusion. This process is quite independent of the amount of lymph produced.

For example, hyperfunction of a cell may cause a sudden decrease of oxygen, calcium or sugar in the adjacent tissue fluid. The equilibrium is dis-

turbed and diffusion of these substances from the capillary into the tissue space will occur with great rapidity, such is the delicacy of the separating membrane. Such is the rapidity of equilibration that osmotic equilibrium may be established in less than 30 seconds after the termination of an injection of even 40 grams of glucose.

This would appear to be accomplished solely by osmotic extraction of fluid from the lymph spaces into the capillary circulation.

Fodor and Fischen,[2] however, state that these physical factors alone are insufficient—that differences in electrolytic charge form the main factor. Evidence for this is, however, still slight.

These changes, occurring in the reverse direction, take place in the normal life of the tissue.

Activity of any cell causes the breakdown of contained molecules into a number of smaller ones. This causes the osmotic pressure in the tissue cells, and hence in the tissue spaces also, to rise. Fluid passes from blood to tissue space and thence to lymph channel.

It is for this reason that the salivary secretion is accompanied by such a large flow of fluid through the capillary vessels of the gland. Potent proof of the avital nature of the process is afforded by paralysing the tissue cells with atropine; a minimal increase only in lymph flow from the gland occurs.

In short, one result of the activity of a gland is an immediate increase in the flow of lymph from it.

Passage of Lymph—

It has already been emphasised that lymph flow is secondary to increase in tissue fluid.

In the frog the circulation of lymph is maintained by rhythmically contracting muscular sacs —the lymph hearts.

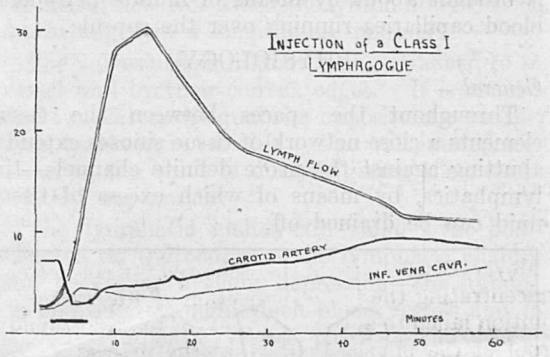
In man the lymph flow somewhat resembles the venous flow. It is forced along partly by pressure *a tergo* and partly by local muscular contraction. The presence of valves ensures passage in one direction only. It is found that in the smaller lymph capillaries the pressure may be at 8–10 m.m. soda solution as compared with 4 m.m. to zero in the mouth of the thoracic duct.

Lee[3] indicated recently that pressure in the thoracic duct is largely dependent upon respiratory movements. Allowing the lymph to ascend a vertical glass tube connected to a cannula in the mouth of the thoracic duct he found that the pressure showed waves synchronous with the respiratory movements, the peak of the wave occurring at the end of expiration. In 30 minutes the pressure rose to 11 m.m. If respiration was laboured a pressure of 26 m.m. might be attained.

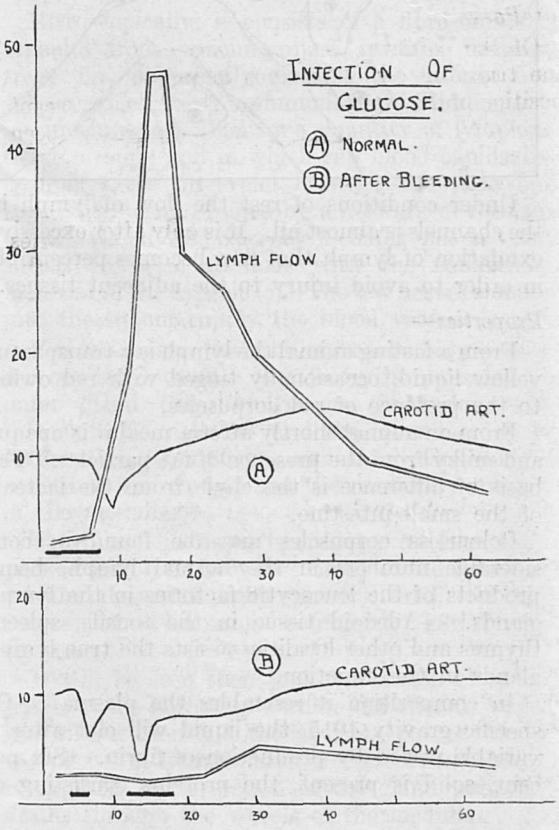
At rest a continuous flow of lymph can only be obtained from the intestinal lymphatics. A recent paper by Florey[4] describes rhythmical propagated contractions in the lacteals of the guinea pig and rat of one-and-a-half second's duration at intervals of two to three seconds. Gut peristalsis appeared to help extrusion of the chyle from the submucosal sinuses, but not from the lacteals.

Lymphagogues—

Lymphagogues may act pharmacologically or physically. The former type, classed by Heidenhain as lymphagogues of the first class, are merely



capillary poisons, and include such as watery extracts of dried crayfish or leeches or ordinary commercial peptone. Although acting principally on the liver, they have been shown to have a



definite effect upon the cutaneous capillaries. A common indication of this is the nettle rash, which frequently follows ingestion of large quantities of mussels.

Physical lymphagogues such as innocuous crystalloids act primarily as seen previously by osmotically increasing the vascular volume. The consequent rise of capillary pressure causes the exudation of large quantities of a rather dilute tissue fluid, particularly in the abdominal organs.

That this is purely physical may be proved by bleeding the animal before injection, a factor which prevents the increase in flow in spite of the fact that the concentration of the lymphagogue in the blood may be even greater than in the previous case.

Kmietowicz and Koskowski[5] produced an excessive flow of lymph under physical conditions by forcing large quantities of water into the stomach.

Meyer, Bisch and Gunther[6] showed too that after concentrating the lymph, injection of a hypertonic solution failed to act as a lymphagogue. Additional proof of the physical nature of the process.

Functions of the Lymph—

These may be either :—

(*a*) Passive ; or

(*b*) Active.

(*a*) *Passive—*

Of the equilibration by means of the fluid in the tissue spaces of changes in pressure or composition of the blood on one hand or of the adjacent tissues on the other sufficient has already been said.

The chief passive function of the tissue fluid is undoubtedly that of nutrition. In all interchanges of any nature between the blood in the capillaries and the active cell it acts as the medium, be the products in exchange anabolic such as oxygen or glucose, or katabolic such as carbon dioxide and ammonia. Protein supply differs in that it is not transferred by a process of diffusion, but would appear to reach the tissue fluid by filtering through the capillary wall under pressure. The physiological value of this is evident in inflammatory conditions when the increase in protein provides an abundant supply of regenerative material.

Whether the normal protein content is in itself a food for the cell or whether it seems only as a transporting agent for glucose, amino acids or fats is a question yet to be solved. Amœboid leucocytes undoubtedly take part in the absorption of fat by the mucosa of the small intestine, but it may be significant that on reaching the lacteal they disintegrate discharging their fat content.

Soler,[7] much impressed by the part which leucocytes may take in metabolism, even assigns to them the functions of carbohydrate storage Evidence on this point, however, is again scarce. In a different sphere the lymph almost certainly takes an active part in transportation. I refer, of course, to the removal of endocrine substances by the process of internal secretion.

The lymph plays a great part in certain other absorbative processes. For instance, a coloured suspension, if rubbed into the skin, slowly fills the adjacent lymphatic vessels and is borne away to the thoracic duct. The obvious simile is the progress of micro-organisms in infection. It is moreover observed that, with the exception of the vessels of the peritoneum or pleuræ, the lymphatics absorb and conduct very slowly unless aided by passive or active muscular movements of surrounding parts—another clinical observation of great significance.

E. R. and L. C. Clarke,[8] in recent observations upon the fate of extravasated erythrocytes in amphibian larvæ, found that if a minute extravasation was made to occur in the tail fins by hitting them the red cells remained intact in the tissue spaces, not being ingested. They were removed either by being drawn into the lumen of the lymphatic or by phagocytosis by wandering cells. Lymphatics, they found, respond to red cells over a range of .76μ in one or two hours. Red cells are thus returned to the circulating blood.

Absorption of normal tissue fluids, as after hæmorrhage, in order to restore the volume of the circulating blood would appear to take place by osmotic pressure exerted by the greater amount of protein in the capillary blood.

(*b*) *Active—*

Lymph per se is relatively inactive.

In shock it is known that the refractive index of lymph is considerably lowered. Kmietowicz and Koslowski found that, if the augmented lymph flow following peptone injection is diverted and does not enter the circulation, the blood changes associated with shock are not in evidence. If both lymph trunks are ligatured the contrary occurs ; the number of red cells increases and the refractive index of the serum is raised. The lymph undergoes a period of augmented coagulability and then passes into an incoagulable phase.

Emmel, Weatherford and Streicher[9] noted that, during active nursing in the albino rat, a marked leucopenia occurs, with a similarly marked decrease in the neutrophils and lymphocytes.

Lymphoid cells passed into the alveoli of the breast participated in the activities of lactation and formed a definite cellular element in the milk. This would necessitate an increase in the lymph supply, as is the case.

FUNCTIONS OF THE GLANDS

It has already been indicated that the hæmolymph glands cannot be considered in the present paper.

You will recollect that in the histological description given of the lymph glands, mention was made of the incomplete arrangement of the trabeculæ, so giving outer and inner collections of lymphoid tissue.

It would appear that the germ centres of Flemming in the outer cortical or secondary nodules are the chief functioning part of the gland.

Analysis of the lymph entering and leaving the gland indicate that a number of leucocytes of the lymphocyte type has been added during the passage of the lymph through it.

These are undoubtedly products of the kariokynetic division of pre-existing cells in the germ centres which penetrate the close reticulum of the lymphoid tissue and enter the lymph channels.

Berneim,[10] whilst approving this function, states that in addition the cortical nodules are responsible for the production of certain protective cells which wander into the circulation and assist in defensive mechanisms ; that probably it is these cells which later form the fibrous tissue in the injured part. That they are, in short, fibroblasts. This would probably be shown to be the chief activity of the lymph gland.

The lymphoid nodules of the liver do not, according to Turchini,[11] produce lymphocytes.

As Herring(c) recently emphasised in comparing the lymph glands with hæmolymph organs and the spleen, the reticular cells and their fibres are equally important as the germ centres.

To a considerable extent in hæmolymph glands, but undoubtedly also in lymph glands proper to a lesser degree, do the reticular cells and fibres exert either a molecular or a phagocytic attraction for foreign particles and products of effete red corpuscles, holding them up and carrying them off into the lymphoid tissue by migrating with them. It is quite probable that this is the origin of those peculiar dark " stainable bodies of Flemming " of such unaccountable presence in germ centres.

The reticulum has already been seen to assist in the purification of lymph by mechanically obstructing its flow.

It has been emphasised that the view is held that the vascular and lymph systems of the lymph gland are separate.

I am convinced, however, that the endothelium of the sinuses of the ellipsoids will be found—as was that of the spleen and bone marrow—to be deficient in parts.

The relation of the lymph glands to fat absorption is probably negligible. Nishibe[12] holds that lymphocytes have no influence whatever on lipoids.

The injection of extracts of the glands is—as this method always is—crude and inevitably inaccurate. It would appear unworthy of careful attention.

REFERENCES

A. Stohr, Ph., " Ueber die ' peripheren Lymphdrusen,' " *Sitz. di phys. med.* Gesellsch. in Wurzburg, 1883.

B. Downey, H., *Hæmotologica*, 3, 431, 1922.

C. Tait, J., " Structure and Functions of Spleen," *Brit. Med. Journ.*, Aug., 1927.

1. Freund, H., *Archir. exp. Path. Pharm.*, 95, 206–34, Germany, 1922.
2. Fodor, A., and Fischer, G. H., *Zeit f. d. ges. exp. Med.*, 29, 465–542, 1922.
3. Lee, F. C., *Amer. Journ. Phys.*, 67, 498–513, 1924.
4. Florey, H., *Eng. Journ. Phys.*, 267–272, 1927.
5. Kmietowicz, F., and Koskowski, W., *Compt. Rend. Soc. Biol.*, 90, 898–900, 1924.
6. Meyer, Bisch E., and Gunther, F., *Pfluger's Arch.*, 210, 763–80, 1925.
7. Soler, F. L., *Arch. di. Scien. biol.*, 6, 107–13, 1924.
8. Clarke, E. R., and Clarke, L. C., *Amer. Journ. Anat.*, 38, 41–70, 1926.
9. Emmell, V. E., Weatherford, H. L., and Streicher, M. H., *Amer. Journ. Anat.*, 38, 1–40, 1926.
10. Berneim, M., *Bull. his. appl. a la physiol. et a la Path.*, 1, 441–8, 1924.
11. Turchini, J., *Bull. soc. sci. Med. Montpellier Fasc.*, 9, 446–9, 1924.
12. Nishibe, M., *Med. News Japan Med. World*, No. 1113, 3 to 23, 1923.

Guy's Hospital Gazette

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office :—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

Advertisement Rates on application to " The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone : Hop 1086.

Guy's Hospital Pupils' Physical Society.

PROGRAMME, 1927–28

1927

Thursday, October 13th—
8 p.m., Opening Meeting, Clinical and Pathological.
Chairman : Sir Charters Symonds.

Thursday, October 20th—
8 p.m., Clinical and Pathological Meeting.
Chairman : Mr. Freezer.

Tuesday, November 1st—
4.45 p.m., Joint Meeting with the Physiological Society. Discussion to be opened by Messrs. C. K. Simpson and S. Shone on "The Lymphatic System in Health and Disease."
Chairman : Mr. Havard.

Thursday, November 17th—
8 p.m., at St. Thomas's Hospital. Joint Meeting with the Medical and Physical Society of St. Thomas's Hospital.
Chairman : Mr. W. F. Hudson.

Thursday, December 1st—
8 p.m., Clinical and Pathological Meeting.
Chairman : Mr. Rake.

Thursday, December 15th—
Subject not yet arranged.

1928

Thursday, January 12th—
8 p.m., Clinical and Pathological Meeting.
Chairman : Mr. Roche.

Thursday, January 26th—
8 p.m., Paper by Mr. H. N. W. Harley, "The Seat and Causation of Abdominal Pain."
Chairman : Mr. S. C. H. Lane.

Thursday, February 9th—
8 p.m., Clinical and Pathological Meeting.
Chairman : Mr. Kettle.

Thursday, February 23rd—
8 p.m., at Guy's. Joint Meeting with the Medical and Physical Society of St. Thomas's.
Chairman : Mr. West.

Thursday, March 8th—
8 p.m., Clinical and Pathological Meeting.
Chairman : Mr. Plowright.

Thursday, March 22nd—
8 p.m., Paper by Mr. T. G. Scott, "Some Observations on Blood Pressure."
Chairman : Mr. Dunnill.

Thursday, April 12th—
8 p.m., Clinical and Pathological Meeting.
Chairman : Mr. Rickett.

Thursday, April 26th—
8 p.m., Reading of the Treasurer's Prize Essay.
Chairman : Mr. Abrahams.

THE SOCIETY'S PRIZES

In addition to the Treasurer's Prize, the following Prizes are awarded by the Society :—

A Prize of £10 for the best Paper read before the Society during the session.

A Prize of £5 to the member who distinguishes himself most in the discussions.

A Prize of £5 to the member who exhibits the best specimens of scientific interest during the session.

Correspondence.

Bibliographies.

DEAR SIR,—As Editor of the *Guy's Hospital Reports* it is my duty to see that the references given at the end of papers submitted for publication are correctly compiled. I was therefore glad that the Wills Librarian has given some good advice on the subject in the GAZETTE. I think that perhaps he does not sufficiently emphasise the point that the first and most important step is to read the original paper. There is nothing more absurd than to see a long list of references at the end of a paper, none of which the author has troubled to consult, and many of which are perhaps published in languages he cannot understand.

The exact form of the reference is not very important, so long as it is uniform. The order should be the same as that in which they are quoted in the text, and neither alphabetical nor chronological. The practice in the *Guy's Hospital Reports*, which is that most widely adopted in international medical literature, differs from that given by the Wills Librarian in putting the initials (without brackets) before instead of after the name of the author, the first page of the reference without the last, and the year at the end instead of before the page. It is also unnecessary to add the place of publication of a journal. The reference given by the Wills Librarian would thus read : "J. L. Miller and J. L. Williams, *Trans.*

Assoc. Amer. Physicians, xxxv, 68, 1920," instead of "MILLER (J. L.) and WILLIAMS (J. L.), *Tr. Ass. Am. Physicians*, Phila., xxxv, 1920, 68–70."

Yours faithfully,

ARTHUR F. HURST.

November 12th, 1927.

Fund for the late H. W. Evans.

DEAR SIR,—The late Dr. Henry W. Evans had been only six years in practice in East Norfolk, but during that time he had won the esteem and affection of all who knew him, not only for his high professional attainments, but also for the sympathy, unselfishness and other sterling qualities which he possessed in so great a degree. His many friends and patients in this district are raising a fund in his memory for the benefit of his widow and two small children. We feel sure that there are many of his former colleagues from his old school, his hospital, and elsewhere who would likewise desire to commemorate him.

We shall be very glad to receive any subscription towards this Memorial Fund.

We remain, sir,

Yours faithfully,

MARGARET HARKER, Blofield Hall.
A. E. WALKER, Brundall.
G. E. FFISKE, Brundall.
H. J. STARLING, M.D., Norwich.

45, All Saints' Green,
Norwich.
November 13th, 1927.

The Operations of Surgery.

DEAR SIR,—In a recent issue of the GAZETTE you published a review of the last edition of *The Operations of Surgery*.

At the end of his article your reviewer touches on a point which has, I am sure, occurred to many Guy's men who had the privilege of knowing the author of the book, I mean the omission of the name of "Jacobson" from the title page.

Without detracting one iota from the credit due to the editors for their brilliant work—they have rewritten and recast a large part of it and maintained its place as a leading authority on British operative surgery—many feel it were only a just and graceful act to preserve the name of Jacobson—so honoured in his generation as surgeon, scholar and teacher—in the title of this book.

Jacobson's Operations is known the world over, and it is to be hoped the familiar title will continue, a lasting memorial of its gifted author.

Yours, etc.,

A. H. GODSON,
One time H.S. to Mr. Howse and Mr. Jacobson.
The Surgery,
63, Union Street W.,
Oldham.
November 1st, 1927.

CORRECTION. We regret that in the review of this work in our issue of October 22nd, p. 459, col. 1, para. 2, a misprint had occurred, which conveys a rather serious difference in the meaning to that which was intended by the reviewer. The word "clinical" should read "classical."—ED.

Reviews.

The Science and Practice of Surgery. By W. H. C. ROMANIS, M.Ch., F.R.C.S., and PHILIP H. MITCHENER, M.S., F.R.C.S. 1st Edition. 2 Vols., with 666 Illustrations. Published by Messrs. J. & A. Churchill. *Price* 14*s.* each volume.

THERE are many excellent works in English on the art of surgery, and it is certain that to this number must be added *The Science and Practice of Surgery*, which has been produced by Mr. Romanis and Mr. Mitchener of St. Thomas's Hospital. In writing this book the authors have had two main objects in view, the first being "to place before the student a book which is sufficiently comprehensive to provide him with all that he will require in passing both his ordinary surgical examinations and any higher examinations to which he may aspire, such as the Fellowship of the College of Surgeons." That the book is sufficiently comprehensive the reviewer is left with no doubts. It is divided up into two volumes—the first dealing with general surgery and the second with regional surgery. In the chapters on general surgery, those dealing with the injuries and diseases of nerves and the injuries of the bones are extremely good; all the most modern teaching is contained in the section dealing with fractures, while the reviewer does not remember having seen a better or more complete account of the surgery of the nerves. Volume 2 is also good throughout, but here again especial mention must be made of two of the sections, namely, those dealing with hernia and the diseases of the appendix. Strangulated hernia is described with a clearness and accuracy which can only be the outcome of much clinical experience, while the indications for operating in acute appendicitis are defined and reasoned out in a very thorough manner.

Throughout the work the authors have endeavoured to give a full account of the surgical

pathology and the scientific side of the subject as well as the more practical details, such as diagnosis and treatment. In both volumes, where applicable, each chapter has been prefaced with a short account of the applied surgical anatomy and physiology of the region or organ under consideration and, by the use of smaller type for these sections, the book has been kept within a reasonable size, there being 757 pages in the first and 921 pages in the second volume. Chapters dealing with diseases of the eye, diseases of the ear, nose and throat, on anæsthetics, on X-rays in diagnosis and treatment and on the surgical aspects of obstetrics and gynæcology have been included, and these maintain the high standard of the rest of the work.

In one respect the book is inadequately represented, and this is with regard to the plates showing X-ray appearances, which are most indistinct. This is especially shown in Plates I and IV in Volume I, which are intended to illustrate the section dealing with fractures. A few pen and ink semi-diagrammatic diagrams would be a great improvement if better X-ray plates cannot be obtained for future editions. Apart from this, the illustrations are throughout excellent.

Post-anæsthetic vomiting is given a few lines, while obsolete operations such as Petit's subastragaloid, Lisfranc's and Chopart's operations take up valuable space. This might well be given to a fuller discussion on the nature and causation of so important a subject, in the after-treatment of operations, as post-anæsthetic vomiting.

The author's second object in producing this work is " to present a book which may be of value as a work of reference to the medical practitioner." In this respect it will, no doubt, have its uses, but it is rather to the student that it is recommended as an accurate, clear and well-written treatise on the knowledge of the art of surgery, as existing at the present day.

Guy's Hospital Reports (Bright Centenary Number). Vol. 77 (Vol. 7, Fourth Series). Nos. 3 and 4. July and October, 1927. *Price* 25*s*.

WE should like to congratulate Dr. A. F. Hurst on the production of a double number of the *Reports* which is in every way worthy of so important an occasion as the Centenary of Richard Bright.

Those who were privileged to hear the Bright Oration delivered by Professor Thayer in July will now be able to enjoy his address at their leisure. For those who were not then present this distinguished and scholarly tribute to the memory of a great man will make most pleasant and profitable reading. Mr. Eason and Dr. Ryle carry on the historical theme so admirably begun by Professor Thayer in their notes on the clinical wards in Bright's time and the following up of his work by many of his famous successors.

Modern Continental medicine is represented by the address of Professor Ludwig Aschoff, a thoughtful discourse on the pathology of renal disease that should be of great use to the student. Professor Lemierre of Paris follows with a more clinical contribution clothed in the most elegant French we have ever read.

It fell to Professor Pembrey to fill the gap left by the premature death of Professor Starling. His account of Starling's work on the kidney gives an excellent idea of the important bearing it had on the modern ideas of renal disease, and of a great physiologist successfully attacking the complex problems arising directly from the work of Bright as pathologist and physician.

Sir John Rose Bradford gives a concise yet complete account of uræmia and presents a clear and extremely useful view of another aspect of renal disease. His remarks are essentially clinical in nature and, hence, all the more acceptable to Guy's men.

Dr. Nicholson attempts the correlation of the morbid anatomy and embryology of the kidney in that thoroughly interesting manner we have come to associate with his writing. Incidentally, an extensive field of information is admirably covered in this short paper, whose author is not afraid to draw conclusions from the evidence he has gathered together.

Experimental medicine and the work of more recent years is represented in the paper by Dr. Osman on the use of alkalies in Bright's disease. The development of the prophylactic use of alkalies in acute renal conditions is described and a full account of the methods of treatment as indicated by extensive experience is included. Dr. Ryffel deals with the blood chemistry and the uses of excretion tests in renal conditions, while Dr. Fawcett gives full case reports and a discussion on the surgical treatment of chronic Bright's disease. Dr. Dowling deals with the nephritis that is a rare manifestation of syphilis, while Mr. Thompson develops the thesis that some forms of chronic renal disease may be due to obstruction in the lower urinary tract. Short papers on tonsillar sepsis and nephritis are contributed by Mr. Greenwood and Mr. Jepson. Dr. Gillespie deals briefly with the mental symptoms in Bright's disease. Dr. Cameron contributes his mature experience in the treatment of the difficult condition of enuresis. Dr. Knott's paper is concerned with the laboratory examination of the pathological urine.

The concluding verbatim account of the centenary ceremony makes highly interesting reading. Many of the speeches were not only a great pleasure to the ear, but also a glowing expression of the real sincerity of the tribute which lay behind them. We feel glad that they should be preserved to honour Bright in his own volume of the *Reports*.

Cunningham's Manual of Practical Anatomy. Revised and Edited by ARTHUR ROBINSON. 8th Edition. In Three Volumes. Published by The Oxford University Press (Milford). *Price* 12*s.* 6*d.* each Volume.

CUNNINGHAM'S *Manual of Practical Anatomy* is essentially a book for use in the dissecting room. Divided into three volumes, it deals systematically with the dissection of the whole body.

Vol. I contains the dissections of the upper and lower extremities, Vol. II the abdomen and thorax, and Vol. III the head and neck. In turn the dissection of the various regions is described. The actual practical instruction is confined to small print and, by carefully studying and following the instructions given, the dissector will find that he knows, when he comes to read the main text on the region under consideration, a great part of his dissection already.

The volumes are extremely well illustrated with drawings of actual dissections, diagrams in colour of the bones with their muscular attachments, and X-ray photographs of the joints of the body. The description of the joints come at the end of each section, and are apt to be skipped over rather hastily by the dissector. No greater mistake is possible, and a careful dissection and accurate knowledge of the joints of the body will be invaluable later when studying medicine and surgery.

The eighth edition varies from previous editions only inasmuch that errors in the text have been corrected and some of the figures have been replaced by new and better illustrations.

Wheeler's Handbook of Medicine. By W. R. JACK, B.Sc., M.D. 8th Edition. Published by Messrs. E. & S. Livingstone, Edinburgh. *Price* 12*s.* 6*d.*

"WHEELER and Jack" is known to all medical students, and especially to those who are nearing qualification. First published in February, 1894, it still is the most comprehensive of all the many smaller text books on medicine.

The subject-matter follows the usual orthodox arrangement, and is divided up into eighteen sections. These, in turn, deal with fever, immunity and the specific infectious diseases, under which heading is also included such diseases as cerebro spinal fever, acute poliomyelitis and those infectious diseases of doubtful or unknown ætiology, but whose general course are suggestive of a specific infection, such are scarlatina, measles and rheumatic fever.

Next are described the diseases of metabolic upset and those due to physical and chemical agents. Finally, the diseases of the several systems of the body are described in turn.

In each disease a brief description of its main features is first given. Then is discussed its ætiology, morbid anatomy, symptoms, diagnosis and, finally, its treatment.

No new article has been introduced, but every part of the book has been carefully revised with the object of "bringing it as completely as possible up to date in pathology, symptomatology and treatment."

Manual of Bacteriology. By ROBERT MUIR, M.D., and JAMES RITCHIE, M.D. 8th Edition. Published by The Oxford University Press (Milford). *Price* 16*s.*

"MUIR and Ritchie" is too well known to the student of medicine to need a very detailed review. This, the eighth edition, appears after an interval of six years, during which time the work has been deprived of the services of one of its authors, by the death of Professor Ritchie. During this time the text has been thoroughly revised by Professor Browning, of Glasgow, and Professor Mackie, of Edinburgh. Extensive additions and alterations are present in nearly every chapter, while the opening chapter has been entirely rewritten. By the relegation of the less important matter to smaller type, the actual size of the book has not been greatly increased. A number of new illustrations have also been added.

Following the introductory chapter on their general morphology and biology, the methods of cultivation of bacteria—the preparation and uses of such media as agar, broth and serum media, the methods used in the separation of aerobic organisms by means of plate cultures, and the culture of anaerobic organisms by Bulloch's apparatus and M'Intosh and Fildes anaerobic jar—are described.

Next are dealt with the general microscopic methods such as dark-ground illumination and film preparations, as well as the use of mordants and decolourising agents—Gram's method, Ziehl-Neelsen method for tubercle bacilli and other special staining solutions. Agglutination methods, the reaction of Bordet and Gengou and the Wassermann reaction are next described, while later

chapters are devoted to the nature of toxins and the theories of toxic action, immunity, anaphylaxis and the serum disease in man.

Finally, the different organisms are described in detail.

This edition maintains the high standard obtained by this work and is well recommended.

Surgical Applied Anatomy. By Sir FREDERICK TREVES. Revised by C. C. CHOYCE, M.D.Edin., F.R.C.S. 8th Edition. Published by Messrs. Cassell & Co., Ltd., London. *Price* 14s.

MORE than 40 years have elapsed since the first edition of this book was published. Originally written by a surgeon, it has been revised several times and expanded by an anatomist, Sir Arthur Keith. It thus gives a presentation of facts and their applications which cannot be found elsewhere in the same collected form. For this reason it still makes a great appeal to the senior student as well as to his teacher. The eighth edition is slightly larger than the seventh to the extent of some 26 pages. Much new matter and many new illustrations have been introduced, and the whole subject matter has been thoroughly revised. It is divided up into six parts, viz.: Head and Neck, Thorax, Upper Extremity, Lower Extremity and the Spine and Spinal Cord. In each section it is assumed that the reader has some knowledge of human anatomy, and all detailed anatomical descriptions have therefore, except in a few instances, been omitted. It deals rather with the bearings of the anatomy of the parts upon the circumstances of practice. By this means the student is assisted in judging which parts of the matter he has learned in the dissecting room to be of value. The volume is of convenient size, of nice type, and is very well illustrated with over 200 figures, many of which are in colour. The student preparing for his final examination in surgery will find in it all the applied anatomy that he requires.

Aids to Gynæcology. By R. E. TOTTENHAM. 7th Edition. Published by Messrs. Baillière, Tindall & Cox. *Price* 3s.

THIS popular member of the "Aids" series now reaches a seventh edition, in which the chapter on menstruation has been rewritten and an account of anterior colporrhaphy included. Gynæcology, a conveniently circumscribed subject, lends itself well to the synopsis form. But this little book is far from being a mere collection of lists. It is well written—and what is more, well illustrated—with its subject matter arranged in a clinical form.

Ovarian endometrioma is given a rather full notice, but no mention is made of the radium treatment in chronic metritis, which so often proves of value as a sop to throw to the dual cerberus sitting on the opposide side of the table during one's midder viva.

Materia Medica. By Sir W. HALE-WHITE, M.D. Lond., M.D. Dub. 19th Edition. Published by Messrs. J. & A. Churchill, Ltd. *Price* 10s. 6d.

AFTER a lapse of only three years a new edition of Dr. Hale-White's work has been presented to the public. The composition of the book is essentially similar to that of its previous editions, each section containing both the pharmacy, pharmacology and therapeutics of the drugs under consideration. Thus, in a manual of convenient size, is to be found all the information concerning materia medica necessary to the student of medicine. This edition is slightly larger than the previous one, and contains some important additions. These include such drugs as mercurochrome, sanocrysin, parathyroid, scarlet fever antitoxin, bismuth as used for syphilis and carbon dioxide in anæsthesia.

Discussing the therapeutic action of mercurochrome, the author states that "intravenously 25 c.c. of the same is used in septicæmia with doubtful success." The reviewer has seen several cases of septicæmia which have *undoubtedly* benefitted by the use of this drug.

The remainder of the text has been thoroughly revised. The book is well written, interesting and very instructive, and is quite the best book on the subject for the medical student, as he may both learn from it and, later on, use it as a sound guide to which he may refer.

Diseases of the Ear, Nose and Throat. Edited by Dr. LOGAN TURNER. 2nd Edition. Published by Messrs. John Wright & Sons, Bristol. *Price* 20s. *net.*

THE second edition of the above work is very welcome. The first edition appeared in 1924 and a second impression, with a few minor alterations, in 1925.

As a testimony of its popularity is now presented the second edition, each section revised and a certain amount of new matter added. The same arrangements have been maintained, each section written by the "team" working in Edinburgh, and, again, for the resulting work nothing but praise can be given. The new material has increased slightly the size of the new volume.

There is an excellent illustrated description of West's operation of dacryocystostomy and the section dealing with the peroral endoscopy has been expanded by Dr. Ewart Martin. In the chapter dealing with the diseases of the œsophagus,

giving rise to dysphagia, it is regrettable to find nothing about that clinical type of dysphagia associated with secondary anæmia and atrophy of the mucosa of the upper food passages. Pharyngo-œsophageal spasm is not uncommon in this condition. These changes could also have been given as one of the clinical signs often heralding malignant disease in this region.

In the section on diseases of the ear by Dr. J. E. Fraser, the chapters on otosclerosis, intracranial complications of middle ear disease and the labyrinth, and the eighth nerve have been rewritten. It has been thought inadvisable to give an account of the experimental work on the otoliths and its relation to clinical investigation.

Another feature of this book is the excellent way in which the essential anatomy of the various sections has been written. Mr. Lithgow's illustrations on the actions of the intrinsic muscles of the larynx are most ingenious.

This text book may again be looked upon as the best of its kind in the English language. Not only is it of the greatest value to the student, but also to those devoting themselves to the speciality. The book is a credit to the greatness of the Edinburgh school.

Sport.

Rugby.

Guy's v. London Scottish.

OUR visitors to Honor Oak Park on Saturday, November 5th, were able to field their strongest fifteen, which included several well-known Internationals and the old Oxford Blue, W. N. Roughhead.

Guy's were strengthened by the return of T. O. Garland and P. D. B. Spence, the latter giving a very fine display, his defence being particularly good.

It was an exciting game and full of thrills. The marking and tackling of both sides were deadly throughout. Up to within 15 minutes of time it was anybody's game; the exchanges had been fairly even and several promising movements which deserved a score were only frustrated by fine defensive work on either side.

For the last quarter of an hour Guy's fairly surpassed themselves and gave a wonderful exhibition, with the result that three tries were scored in quick succession. During this period the Scottish were simply swept off their feet and were kept defending their line. Our forwards played magnificently and were ably supported by the backs, who greatly improved upon previous performances. Lewis and F. H. B. Spence in particular were in good form and were confident in everything they did.

For three-quarters of the game the Scottish forwards showed plenty of dash and were the more prominent in the loose, whereas Guy's controlled the scrums and enabled Garland to give his backs more opportunities than his opposite number. No doubt Garland would have had many more chances had the back row forwards heeled the ball quicker.

There were a number of penalties awarded to Guy's chiefly through over anxiousness on the part of Douty, who was constantly offside.

Guy's kicked off against a strong wind and our visitors at once attacked. Offside brought relief to Guy's, and P. D. B. Spence found touch with a good kick. The Scottish came again and Mackinnon cross-kicked to McCrea, who raced away for the line, only to be collared by Robinson and thrown into touch near the corner flag. We were then penalised for feet-up and Drysdale missed a good opportunity to score from an easy position.

Two penalties were given to Guy's, and from the second Durr attempted to drop a goal, but the wind was too strong and the ball sailed just wide of the upright.

After Preen had stopped a forward rush, Popplewell came along with a fine dribble. Ryan picked up and punted over Drysdale's head. The latter recovered and with a splendid kick sent Guy's back to their 25. Guy's pressed and F. H. B. Spence and Garland were only stopped on the goal line.

Durr attempted another penalty goal, but again the wind was too much for him. Following this there was a brilliant round of passing between our three's, only to be spoilt by a forward pass to the wing.

Continuing the attack Preen gathered and, running strongly, punted ahead and eventually cross-kicked to Malone, who failed to gather the ball, with the line at his mercy.

Another penalty to Guy's for offside enabled Durr to give Guy's the lead with a perfect goal.

Simpson-Smith and Cullinan made a good effort to break through, but Drysdale was equal to the occasion and drove them back.

Soon after, Preen secured and gave two splendid dummies before passing to Ryan, but the movement broke down when the latter gave an erratic pass to Robinson. Just before the interval P. D. B. Spence saved in brilliant fashion when Douty was through.

On resuming, the Scottish forwards came away with a terrific rush, and Guy's had their work cut out in holding them back. Firstly Mackinnon, and then Aitken, made fine efforts to break through, but P. D. B. Spence tackled fearlessly and brought them down when dangerously near our line.

Offside against Preen enabled the Scottish to attack again, but Durr secured a mark and brought temporary relief.

After Drysdale had saved, Aitken again broke through on his own, only to find P. D. B. Spence the stumbling block.

Durr and Lewis figured in a good passing and inter-passing movement, and the former was only brought down in the nick of time. McCrea broke away for the visitors, but F. H. B. Spence made a fine tackle and prevented progress.

Then a dramatic change came over the game and our forwards, with Scholefield, Popplewell and Durr prominent, brushed aside all opposition and set up a continuous attack on the visitors' goal line. Several scrums were formed and eventually Preen secured, gave the dummy, and scored in the corner. Durr failed to add the extra points.

From the kick-off Ryan cleverly found touch with an overhead kick. Both he and Preen were nearly over. Preen again obtained the ball and, passing to Robinson at the opportune time, enabled the latter to score the second try.

Just before time Malone picked up in the loose and obtained the final try, which was not converted.

Thus Guy's retained their unbeaten home record with a brilliant victory by 1 penalty goal and 3 tries (12 points) to 0.

Guy's Team—P. D. B. Spence; T. G. Robinson, D. F. Ryan, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, V. R. Preen; J. R. F. Popplewell, W. H. Myburgh, G. G. Cameron, J. Durr, B. G. Scholefield, J. H. Cullinan, A. Simpson-Smith, C. D. Malone.

Guy's "A" v. London Welsh "A."

THIS match was played at Herne Hill on October 29th and resulted in a win for Guy's A by 1 goal and 6 tries (23 points) to 0. Neither the Hospital nor their opponents were at full strength, but while the Hospital played well together, the Welsh three-quarters seemed negligible as an attacking force. Guy's were on top throughout—in the tight scrums, and even when they lost the ball their defence and winging was so effective that only once did the Welshmen ever look like scoring, and then the movement seemed to fade away.

Van Niekirk at scrum half was very effective and Ive and Littledale combined very well on the right wing, and between them were responsible for most of the scoring. Mostert showed glimpses of his old form, but seemed rather uncertain of himself and the ball. The kicking on both sides was not good. The first try was scored by Ive far out after a straightforward passing movement. Soon after Clarke scored from a forward rush. After half-time tries were added by Ive (2), Littledale (2) and Van Niekirk, the last a brilliant break away round the side of the scrum. Tregarthen converted one of these.

Guy's Team—E. M. Harding; T. L. Mostert, G. V. Steward, E. J. Littledale, O. Ive; W. B. Clegg, J. J. Van Niekirk; J. C. T. Tregarthen, A. R. Clarke, R. N. C. Smith, L. Hilton, G. Lashmore, D. S. Clogg, R. A. P. Hogbin, J. W. H. Jones.

Guy's v. Coventry.

IN our opening match of the season Coventry inflicted a decisive defeat on the Hospital, but since then both teams have done extremely well and the return fixture, which took place at Honor Oak Park on Saturday, November 12th, aroused a great deal of interest. Guy's lacked the services of J. Durr, for whom R. A. P. Hogbin deputised, and our visitors were without A. Gascoigne and E. J. Field, their scrum half and right wing three-quarter respectively.

The majority of the fifteen had had a strenuous week of football. After the game against the London Scottish eight of the team journeyed to Dublin to play for the United Hospitals on the Tuesday, and on the Thursday Guy's had no fewer than eight members playing in the county games either for Kent, Surrey or East Midlands.

As anticipated, it was a keenly contested and strenuous game, with either side anxious that nothing should be given away. During the week Garland received a fair amount of publicity through his fine display for Surrey, with the result that Bonham, the visitors' scrum half, hung on to him like a leech. In spite of the latter's close attentions, Garland made several brilliant openings, and was ably supported by Preen, who also displayed excellent judgment throughout.

Both sets of forwards had a great fight, and although Coventry had rather the better of the first half, Myburgh gradually gained the upper hand and gained the ball repeatedly later in the game.

It was a pity that Popplewell got injured so early in the game—he twisted his leg rather badly, but manfully carried on, although he was more or less a passenger.

P. D. B. Spence again gave an excellent display at full back, whilst Lewis and Robinson were good on their respective wings.

A draw of 3 points each was a fitting result, but either side might have gained the day if they had accepted all the opportunities that came their way.

Soon after the kick-off our visitors were penalised for offside, but Hogbin's kick was well short of the posts. Popplewell then dribbled in fine style, and a short punt by one of the Coventry forwards enabled Cullinan to secure a mark in midfield. Coventry then set up a hot pressure through their forward rushes, during which Popplewell was injured. Guy's were penalised for feet up, but Carter failed with an easy kick.

A fine passing movement in which Garland, Malone and Robinson figured, carried play to the visitors' 25, but we were soon driven back, and one of the visitors was actually crossing our line when he dropped the ball and thus missed a certain try. Another round of passing between Preen, Garland and Robinson nearly enabled Garland to go through, but Pitcher, Coventry's full back, saved and found touch with a fine kick.

A combined rush by our forwards looked dangerous for the visitors when Malone charged down the full back's kick well inside their 25.

Preen made an excellent solo effort, and Guy's were awarded a penalty, but nothing resulted.

Just before half-time Coventry were given a penalty in front of the posts, but again the kick was unsuccessful.

Early in the second half Scholefield intercepted a pass and our forwards took the ball into the visitors' 25. We were soon driven back and a five yards' scrum in front of our goal looked dangerous. P. D. B. Spence relieved, and Lewis, accepting from Preen, ran strongly before being pushed into touch at the half-way line.

Malone found touch with a good kick, and very soon afterwards Garland created the opening that led to our try. Securing from a scrum he made good headway before passing to Preen, who gave to Ryan. At the opportune moment the latter sent in Lewis, who ran strongly and scored near the corner. Ryan failed to add the extra points. Guy's again pressed, and Preen, obtaining a mark, gained a lot of ground with a good kick. However, the visitors forced us back to our 25, and Garland was penalised for picking the ball out of the scrum. Carter made no mistake with the resulting kick. Guy's then pressed heavily and Lewis was only pushed into touch near the corner flag after a fine round of passing. In the last minute or two Garland broke away and passed to Hogbin. The latter's pass to Preen was intercepted and a golden opportunity lost.

Result—Guy's, 1 try (3 points); Coventry, 1 penalty goal (3 points).

Guy's—P. D. B. Spence, A. J. D. Lewis, F. H. B. Spence, D. F. Ryan, T. G. Robinson, T. O. Garland, V. R. Preen, J. R. F. Popplewell, G. G. Cameron, W. H. Myburgh, R. A. P. Hogbin, B. G. Scholefield, C. D. Malone, A. Simpson-Smith, J. H. Cullinan.

1ST XV FIXTURES

Date	*Opponents*	*Ground*
Nov. 19	Blackheath	Rectory Field, Blackheath
„ 29	Northampton	Northampton
Dec. 3	Richmond	Richmond
„ 10	Aberavon	Aberavon
„ 17	Old Alleynians	Honor Oak Park

RUGBY FOOTBALL RESULTS

"A" XV—		
v. Catford Bridge	Won	15–3
v. Haileybury College	Lost	3–5
v. Christ's Hospital	Won	31–0
v. Old Paulines	Lost	3–10
v. Brighton College	Won	21–3
Extra "A" XV—		
v. National Physical Laboratory	Won	29–0
v. H.A.C. Extra "A"	Won	23–0
v. Artillery College	Lost	0–18
v. Royal Veterinary College	Lost	3–10
"B" XV—		
v. Richmond "B" XV	Lost	0–37
v. London Rifle Brigade	Lost	0–45
v. Siemen's "A"	Lost	0–6
v. Mid Herts	Lost	0–17
v. Aske's School	Won	6–0
Nomads XV—		
v. Christ's Col., Blackheath	Lost	11–13
v. Cranbrook School	Won	24–20
v. Battersea Polytechnic	Lost	0–18

Association.

Guy's v. Old Bradfieldians.

THE above game was played at Honor Oak Park on October 29th, under pleasant conditions, Old Bradfieldians winning by 5–1. In view of the fact that Guy's had several reserves playing, the game was most satisfactory, the team playing determined football and holding their own against a good eleven except in front of goal.

The Old Bradfieldians were quickly off the mark and scored in the first five minutes, but by the

end of some ten minutes Guy's were beginning to retaliate, and clever play by the right wing—Evans and Ashling—several times took the ball into our opponents' goal area. However, the Old Bradfieldians scored twice more in this half, while Evans from a good position shot wide. Half time, 0–3.

In the second half Guy's straight away carried the ball well down the field, but the backs cleared, and their forwards added to the score from a centre which their centre forward headed into the goal, W. D. P. Evans failing to punch the ball clear Further brisk play, with rapid interchange of the ball, led to a goal from Scanlan, who ran the ball into the net, making the score 1–4. Just before the finish the Old Bradfieldians scored again.

E. E. Evans and L. Ashling played exceedingly well on the right wing, but the remaining forwards, who were reserves, were unable to give them the necessary support. W. D. P. Evans was good in goal. As a whole the team put up a good fight, and at full strength should prove a sound combination.

Guy's v. H.A.C.

A MATCH with the H.A.C. is one to which Guy's Soccer team always looks forward, and the game with them on November 5th was by no means disappointing, for it was by far the best match we have had this season. It is true we lost 3–2, but if full consideration is taken of the general run of the play a more representative result would have been a win in our favour. In the first half we were far superior to our opponents, and should have been more than one up at half-time.

Our remodelled forward line, with Mailer at centre forward, and Evans at inside right, was a success, and many really good passing movements took place between our forwards. It is very gratifying to notice such improvement, with the Cup matches just looming into sight.

From the very start of the game Guy's did most of the attacking, and maintained considerable pressure on the H.A.C.'S goal. Their 'keeper, however, played excellently, and he saved many shots which would have been goals with other goalkeepers. Our defence, too, played very well, and Robertson's return was exceedingly welcome. Smallshaw looked after Covington, the Company's centre forward, very closely, and with him exerting less influence their forward line represented a much less formidable combination. Our many shots at goal were unsuccessful, but shortly before half time Fulford, at outside left, gained possession of the ball following a good passing movement and opened the scoring with a good shot, which dropped over the goalkeeper's head. Soon after this the whistle for half-time blew.

On resuming the H.A.C. attacked more strongly and play was confined to our half. Their efforts were soon rewarded when Covington scored with a good shot well out of Evan's reach. This success spurred on our opponents, for it was not very long before they added a second goal, and thus took the lead. After this reverse Guy's attacked strongly and were very unlucky in not scoring, and on one occasion Cantor had a very good shot just deflected round the upright. Our continued attack, however, finally met with reward, when from a scrimmage in front of the goal Ashling netted with a fast ground shot.

Following this our opponents scored their third goal, a rather unsatisfactory one, since it was carried in by the wind from a corner kick. No further score was added, and the H.A.C. thus emerged as victors from an enjoyable and well-contested struggle.

Guy's Team—W. Evans; Brummitt, Robertson; Blaikley, Smallshaw, Stubbs; Ashling, E. Evans, Mailer, Cantor, Fulford.

Hockey.

Guy's v. St. Albans.

THIS match was played at St. Albans on Saturday, November 5th, and resulted in a win for St. Albans by 4–1. The Hospital was not well represented, as the captain and several other members of the team were unable to play.

Play opened evenly, both sides doing an equal amount of attacking, but our attacks were never as dangerous as those of our opponents, and after about ten minutes' play St. Albans scored from a good shot, which, in endeavouring to clear, the goalkeeper allowed to roll over the line. About five minutes later they increased their score, following some ragged play in our 25, our defence being slow to clear.

Soon after this Telleke got the ball and outstripping the defence, ran into the circle and scored from close range.

Up to this point our defence was very ragged and slow to get rid of the ball; notable offenders in this respect were the halves, who also tended to bunch together and leave the wing men unmarked. Our left wing was good, but the right pair seemed rather out of their depth.

In intercepting a centre from the St. Albans' left wing, Conybeare was hit on the knee and had to retire for a while, and although he resumed he was greatly handicapped.

Just before half-time St. Albans scored again, making the score 3–1 against us at half-time.

On resuming St. Albans attacked at once, but the ball was cleared in spite of Corfe hitting across his own goal. We then attacked and from one of the few centres from the right wing Peatfield hit the ball over the goal. From now on we did most of the attacking, forcing several corners, one of which was well taken, Peatfield putting in a good shot which the St. Albans' goalkeeper just managed to save.

In the last few minutes St. Albans broke away on the left and their centre forward scored.

Guy's Team—Wootton : E. T. Conybeare, F. R. Hayward ; F. N. Corfe, R. A. Sykes, W. S. Larcombe ; — Robertson, — Rowlands, C. A. W. Archer (capt.), S. R. Peatfield, R. O. F. Telleke.

Swimming Club.

Nurses' Swimming Gala.

ON October 14th the Nurses held their Annual Swimming Gala in the Nurses' Home Baths.

The Baths, as usual, were crowded, and the place looked gay with Chinese lanterns and decorations.

The most exciting item of the evening was the Team Race between the various women's departments in the Hospital for Miss Hogg's Silver Cup. The Massage, Electrical, Administrative and Nursing Departments sent in teams of four. The Cup was won by the Massage team with ease, amidst great shouting and cheering from supporters of the various teams. Our heartiest congratulations to them and to Miss Murray, their coach, and Miss Hudson, the organiser.

Five nurses competed for Lady Fripp's Cup, which is given in style for the various swimming strokes and diving. The Cup was won by Nurse Smyth for the second year in succession.

There were several races, the prizes for which were very kindly given by the Matron. Much enjoyment was given to the spectators, and we hope to the competitors by the Obstacle and Fancy Dress races. In the latter the competitors must be congratulated on their varied and enterprising costumes. We were once more fortunate in having Lady Fripp and Miss Betty Fripp with us. We all feel it could not be a successful gala without the inspiration of Lady Fripp's presence ; she has always taken such a great interest in the swimming at Guy's and helped the Nurses on every possible occasion. Miss Betty Fripp gave a very much appreciated display of style in swimming strokes and some special " turns."

Miss Daly, of the Bath Club, Miss Hughes, Matron of the Infants' Hospital, Vincent Square, and Mr. Jarman were kind enough to judge the events. Mr. Jarman is always a great asset to us on these occasions. His call for silence in order to announce results would quell the loudest tumult !

Lady Fripp presented the Cups and prizes and spoke a few words to the swimmers, saying how much she thought the general style had improved.

The Matron thanked Lady Fripp on behalf of the nurses, voicing what we all feel, that we owe a great deal to her for the encouragement she gives us and for the interest she has always taken in our swimming.

Miss Holland proposed a vote of thanks to the judges, which was duly carried in the usual way.

Teams for Miss Hogg's Cup—

Massage—Misses Osler, Mason, Marsh, Gilderdale.

Electrical — Misses Rude, Coggins, Collison, Grimes.

Administrative—Misses Mower-White, Goodall, Landon, Spriggs.

Nurses—Misses E. Baker, Smyth, Barrett, Connelly.

Results—

Flat Race—1st, Nurse Smyth ; 2nd, N. Connelly.

Back Stroke—1st, Nurse Barrett ; 2nd, Nurse C. Baker.

Diving for Plates—1st, Nurse Eurich ; 2nd, Nurse Ryan.

Beginners' Race—Nurse W. Sumpter.

Obstacle Race—1st, Nurse E. Baker ; 2nd, Nurse Eurich.

Fancy Dress—1st, Nurse E. Baker.

Best Costume—Nurses Chandler and Huggard.

Guy's Hospital Blues.

Cricket Club—

Full Blue—G. J. Clarke.

Half Blue—R. Eustace, H. S. Gare, J. Hutchinson.

Rifle Club—

Full Blue—H. Richards, C. L. Stevens.

Half Blue—T. Wren.

Swimming Club—

Full Blue—O. M. H. Jones.

Half Blue—R. N. C. Smith.

Tennis Club—

Full Blue—R. B. Pearson, C. Arkles.

Half Blue—R. F. Lomax, C. L. W. Kurtz, D. K. Gaitskell, S. P. Ellis, F. G. Booker, G. M. Housden.

Addendum—The name of T. Morgan was omitted in error from the list of Half Blues awarded to the Rugby Club for season 1926–27.

EDS. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *December 3rd, 1927.* *Number 1027*

PASSIM

IN these days it is apparently no great disadvantage to a large general hospital should its ancient buildings come tumbling down with a rush. A rival concern recently contrived its own collapse to such good purpose that, phœnix like, it was able to rise from a sorry dust to a new and vigorous life. Now, Fleet Street loves a really good ruin. It will seize the occasion to splash its front pages with irrelevant interviews and photographs just as if there were a murder or railway accident about. It exerts itself even to the displacement of profitable advertisements so full of news value is the sight of a noble building come sadly to grief.

It was therefore with great interest that we viewed a large baulk of timber which appeared to support the corner of the Surgical Block containing the Isolation Ward. A closer inspection revealed an extensive crack in the brickwork pier which supports the Cornelius balcony. Our pulse quickened when we thought of the possibilities should another spectacular débacle be imminent. We had visions of a sensation hunting Press unconsciously making adequate amends for their serious interference with the Bicentenary Appeal only a few days after it had been launched.

An interview with the Works Department soon put an end to these vain wanderings of our imagination. The suggestion that the Surgical Block was about to crack up entirely was at once well and truly squashed. A quiet reconstruction of the foundations has, it seems, been in progress for some time. During the course of this work most of the brickwork on which the older part of the Hospital rests has been rebuilt. The seemingly omnious fissure, now visible by the side of the Isolation Ward, will only necessitate a minor alteration such as the strengthening of a corner pier. In fact, the whitewashed timber support seems to have been more in the nature of a piece of praiseworthy foresight on the part of a very efficient Works Department, which realised the way-finding difficulties of gentlemen returning from the Employees' Association Dinner on a foggy evening. Anyone present at this extremely enjoyable function last Friday will bear witness to the probability of this simple explanation.

The senility of the Surgical building is not only in evidence at the site just mentioned, but also in the walls of the Court and Governors' Rooms behind the Counting House. A bulge of some 5 inches has rendered it necessary to shore up the outer fabric facing the Maze Pond. It was singularly fortunate, in view of the two dances held in the Court Room last week, that the tempestuous stampings of the earlier Charleston have passed into the smooth glide of the newer Yale. We must congratulate the Ladies' Association on their excellent organisation last Wednesday and Thursday. The size of the crowd present was kept within the limits imposed by the floor space available, so that we were able to do what we have never done before, namely, to *dance* in a charitable cause instead of shuffling round jammed to death by a crowd with no respect for one's pet corns.

▭

AN important lecture demonstration was delivered to the Hospital Dental Society on the evening of Monday, November 21st, by Professor Gibson and Mr. Kelsey Fry. The subject of their joint demonstration was the new "Walkerite" denture material, which is the result of their own long and arduous research, supported by the technical experience of Dr. Walker. Several advantages, acceptable to patient and dental surgeons alike, seem to result from the peculiar properties of the new material, which is, we understand, a tinted combination of phenol and formalin. Since, to all appearances, man is condemned to an edentulous future, we are not surprised that an alternative

to a rubber and sulphur mixture should be regarded as so important in dental circles both inside and outside the Hospital.

We should like to take the opportunity of congratulating the Rugger XV on their splendid victory at Blackheath. The "Club" game is always regarded—both by ourselves and our critics—as a crucial test, and it was comforting to find just tribute in the papers to the skill and fitness of the team, also mention of our own absentees as well as those of the opposing side. One critic was at pains to account for the magnificent way in which we outlasted our opponents by the declaration that as medical men we no doubt possessed some secret of training which gave us the advantage. He would have a rude awakening if he only knew how little time the Hospital routine leaves players for systematic training of any sort and how much more creditable therefore is their existing record.

We note with great pleasure that Mr. T. O. Garland has been selected to play in the first Rugby Trial at Leicester. This comes as a well-deserved distinction to one of the most popular footballers at the Hospital, and our very best wishes go with him in his partnership with H. C. C. Laird next Saturday.

An International Conference on Light and Heat in Medicine and Surgery will be held at the Central Hall, Westminster, from December 13th to 16th inclusive. The Exhibition concurrent with the Conference will be opened at 2.30 p.m. on December 13th by Sir Alfred Mond, M.P. A number of interesting papers are to be read, among them a dissertation on the "The Ultra-Violet in Sunlight and Artificial Sources," by Leonard Hill, F.R.S. Tickets may be obtained by all interested medical men from the *British Journal of Actinotherapy*, 17, Featherstone Buildings, W.C.1, who are arranging also to present a most extensive collection of the apparatus and accessories used in this form of therapeutics.

We would remind readers that contributions to the Landon Tea Fund will still be welcomed. Especially acceptable are gifts of toys and dolls to help with the Christmas Tree feature of the huge tea in the Out-Patient Department on Boxing Day. All gifts to be sent to Sister Out-Patients, Guy's Hospital, S.E.1, please.

Messrs. Ash & Co. have prepared Christmas Cards, as has become usual, all proceeds of sale being devoted to the Hospital funds. These can be obtained in the Wills Library or Matron's Office.

The Employees' Association Dinner.

On the evening of Friday, November 25th, 1927, nearly 150 people gathered at the Bridge House Hotel on the occasion of the Fifth Annual Dinner of the Hospital Employees' Association. The company present was in every way expressive of that combined yet varied effort which makes toward the continued success of Mr. Guy's hospital in the third century of its existence. Looking around we could discover no department without its representative, and the excellent nature of the entertainment provided made it as enjoyable to the eminent members of the consulting staff who were present as to the red-haired lab. boy we knew in the Medical School. It came as a pleasant surprise to find that the ladies were in no way outnumbered, and that no small part of the evening's proceedings was destined to fall to their lot. By a happy chance we were able to greet our old friend Nash of the Chemistry Department, and to find him unchanged, and apparently unchangeable. His kindly "Aye, aye, sir," brought back memories of earlier days, and is fortunately still his response when an inquiry is made as to his good health.

Mr. H. L. Eason, Superintendent of the Hospital, and President of the Association, took the chair, discharging its many duties with that happy readiness of phrase we have come to associate with him in other circles. The loyal toasts having been honoured, the Chairman called upon Sir William Hale-White to propose "Guy's Hospital and Schools." Sir William found no difficulty in the provision of many and sound reasons that the toast should receive our support. He considered the various ways in which people regarded the Hospital and its doings. To some, no doubt, it was a centre of scientific discovery, of noble work in the cause of humanity, or of athletic prowess, to others perhaps a mere source of appeals for money. He found that our prowess extended widely, even to the realms of art, theology or philosophy, and that on this wide basis of achievement rested the never ending change which was the most essential factor in our success. A survey of this change led him to recall old and, in most cases amusing, incidents connected with Mr. Lewin Payne and the Matron, whose names were coupled with the toast.

In reply Mr. Lewin Payne successfully overcame certain gastric difficulties, and although confessing himself somewhat "at sea," successfully steered a most entertaining course across the treacherous ocean of an after-dinner oration. Having raised our hopes with veiled reference to certain escapades of the Chairman in the days when they were co-dressers, he tactfully withheld details in fear of retaliation. In more serious vein he deplored the recent and most unfortunate loss the Hospital and Schools had suffered in the death of Professor Stokes. He hoped it would soon be possible to announce that the funds necessary for the establishment of the Memorial Scholarship had been secured. He noted with pleasure the presence of Mr. Montagu Hopson, whose recent resignation from the Staff of the Dental School they all so deeply regretted. His presence proved that they had not lost the valuable interest and help of the very first dental student at Guy's. In conclusion he was sure that the Hospital depended in no small measure on those minor unremunerated services rendered so willingly by all those whose work lay within its walls.

The Matron, in an excellent speech, confessed that the occasion found her in a reminiscent mood. She could remember some of the first ladies of the Administrative Staff and had watched the evolution of the Nurses Home from a rough dormitory on the roof of the Medical building to its present form, of which they could well be proud. She noted with pleasure the keen athletic rivalry between the nurses and the ladies of the Administrative Departments. She considered that the results of the Tennis and Swimming Competitions in particular resounded to the credit of both sides.

The Chairman then undertook the presentation of an autographed address to Miss Beardoe Grundy as a mark of the Hospital's appreciation of her long service as Lady Almoner. He remarked that Guy's was nothing if not unorthodox in the staffing of this particular department, upon which so much depended. To use a somewhat horticultural metaphor, they had never any difficulty in "potting out the smaller plants" trained so efficiently in Miss Grundy's office. This fact was in itself a high tribute to the success of her work.

In a short speech of reply Miss Grundy gracefully thanked those who had so kindly provided a memento of her 29 years of service to the Hospital. She could say only that she had been extremely happy at Guy's, and hoped that her efforts had not been in vain.

The final toast of the evening was that of the "Association," proposed by the President. Mr. Eason likened the Hospital to a theatre, presenting only one side of its activities to the lay audience, and hiding from them the hard-working scene-shifters, electricians and so on, without which the show could not be produced. He would like people to remember that every two patients required at least three people to look after them, and that the Works and Administrative Staffs played no small part in the care of those who occupied the beds or came to the Out-Patient Department. He could say with the greatest confidence that the Works Department at Guy's was one of the most efficient in the world. Quite recently he had been privileged to show over the Hospital a deputation which had come specially from Australia to study our works organisation and methods. His only fear was that the Colonials might lure away the present director of that department. Such a thing would indeed be a sad loss, for he knew of no other man who could pacify an irate sister when she complained that a tap still remained unmended three weeks after she had given notice of its faultiness. The excellence of Staff was not confined to one department. Miss Huggett, for instance, had been consulted by Lord Castlerosse, who had based his recent newspaper articles concerning the provision of paying wards in voluntary hospitals entirely on her opinions. On the feminine side he had noticed great changes recently. The sponge bags had blossomed into lower and, he ventured to say, more becoming collars. Heaven alone knew what drastic changes the Matron had in mind regarding the uniforms of the Nursing Staff. He was glad to see several old friends present at the dinner, especially Mills, the porter, Nash of the Chemistry Department, and Harris, whose long tenure of office at Honor Oak Park was now drawing to a close.

He would close with the reminder that those most in the background very often did nearly all the work.

Mr. J. H. Winston, in a comprehensive reply on behalf of the Association, expressed their sincere thanks to the Chairman and to members of the Consulting and Active Staffs who were present. He remarked that a more democratic gathering would be impossible, and that the possibility of such an enjoyable evening was in every way a good omen for the continued success and prosperity of the Hospital. In response to his request Mrs. H. L. Eason kindly consented to distribute the prizes for the year in the various sporting and social activities organised by the Association.

The various toasts and presentations were suitably interspersed with musical and humorous items. The bright soprano of Miss Elsie Coram blended splendidly with the pleasant baritonics of Mr. Clifton Yates, while Mr. George Buck got us all going with his humorous items, especially with his woeful "Tale of Ten Quid." Mr. Emile Philippe

at the piano finally prevailed with some considerable effect on the audience to find its own voice and join in a chorus or two. We were amazed to find that Whitbread, whose stern "Round the corner and second on the right!" sounds the doom of many a hasty patient at the front entrance, could beat us all to a frazzle when it came to community singing.

We must confess that for our own part we were extremely sorry when the time came to sing *Auld Lang Syne*. In the speeches reminiscences had never become "reminiusances," and throughout the whole assembly there prevailed that singular spirit of good fellowship which is the happy possession of Guy's people the world over. It must have been very late indeed when the last of the cheery groups of diners broke up to go their various ways.

Sleep and the Treatment of its Disorders.

A Clinical Lecture by R. D. Gillespie, M.D.

Concluded,

(3) *The Treatment of Disorders of Sleep—*

SLEEP disturbance is like pain in that it is always a symptom clinically analysable in terms of some underlying morbid process. Although this discussion is concerned primarily with diminution in sleep, it is desirable to touch on the rarer condition, in which the duration of sleep is abnormally increased. *Pathological drowsiness* may be either of psychogenic or of physiogenic origin. The physical causes of abnormal drowsiness are very diverse and include such agents as narcotic drugs, endogenous toxins—*e.g.*, in uræmia—and cerebral new growths. Their action is of some importance for a theory of sleep, chiefly however, as Piéron remarks, because they show the multifarious causation of states so closely resembling normal sleep as sometimes to be in all respects by our present methods indistinguishable from it. The drowsiness that accompanies the presence of a tumour in the cranial cavity has been attributed as a rule to the increase in pressure produced by the neoplasm. The recent work of Speranski on the effect of freezing portions of brain tissue suggests that a toxin from disintegrated brain substance may play a part.

It is perhaps surprising at first sight that a notable increase in the amount of sleep may occur from psychological causes, either as a habitual prolongation of the ordinary period of sleep, or spasmodically as a narcolepsy. In the last case the attacks of sleep are hysterical, as, for example, in the youth recorded by Ross who went to sleep if he found himself in possession of an unsatisfactory hand at bridge.

A habitually increased duration of sleep can be a symptom of a mild depression or of almost any psychogenic condition. It is a "flight into sleep" away from the difficulties the patient loathes so much—a kind of accentuation of the dislike we all experience at times in "getting going" in the mornings.

Types of Sleeplessness—

For clinical purposes a very simple classification having a reference to therapeutic methods is desirable.

(1) Sleeplessness due to physical disease—(*a*) of the central nervous system, (*b*) of other parts of the body. The insomnia so produced may be either a direct effect upon the brain cells—from toxæmia, anæmia, etc.—or an indirect effect via the mental route—discomfort or actual pain;

(2) Sleeplessness from external irritation—climatic conditions, etc.;

(3) Sleeplessness resulting from mental causes.

The diagnosis of the cause of sleeplessness of the first type is a problem in genera medicine. It is wise to remember that insomnia may be one of the earlier symptoms of some bodily disease, and a complaint of sleeplessness should always lead to a careful physical examination before the case is included in the second or third groups. Moreover, the physical examination, even if nothing is found, is of considerable importance in reassuring the patient. Nowhere is it more desirable to obtain his complete confidence than in the treatment of insomnia, and a painstaking examination goes a long way towards securing this. Where physical disease is found the treatment is, of course, that of the underlying disease and of its associated discomforts. It would be gratuitous to mention that hypnotics of the ordinary kind are apt to fail where there is pain. Opium is, then, the mainstay, but the coal-tar preparations should usually be tried first, and may be combined with a hypnotic. Aspirin is of use only in the mildest cases. Pyramidon is more potent. It is well to realise that some of the advertised analgesias are actually hypnotic as well. Veramon, for example, is a barbitone derivative, like medinal. Therefore, beware of prescribing them together. It does not follow that because a pain is not relieved by the

milder remedies that it is physical in origin. I have known a psychogenic pain in an elderly hypochondriac that resisted everything but morphia—which was given but once, experimentally.

Before passing to the types of sleeplessness with which we are more intimately concerned, we may deal briefly with the *insomnia resulting from organic disease of the brain* where the latter does not involve the increase of pressure that causes drowsiness. This type is often peculiarly resistant to the action of hypnotic drugs, partly because of the intimate relation of the lesion to the tissues in which sleep appears to have its seat, and partly because of the irritative and release phenomena which are often present. Difficulty in inducing sleep is especially evident in some cases of epidemic encephalitis, both acute and chronic. Even very large doses of hypnotics may fail. Fortunately, the chronic encephalitic patient (at least) does not seem to feel the lack of sleep so much as normal persons do. Thus, a Parkinsonian chronic encephalitic, who slept only four hours each night, felt as fresh as in former days when his average was seven. For the extreme restlessness of certain chronic encephalitics, especially children, a warm wet pack is sometimes very effective in producing sleep when everything else fails. Presumably it acts largely by immobilising the patient, the muscular relaxation inducing sleep. All that is required is two blankets wrung out of water at a temperature of about 101° F. The patient is wrapped closely in them, the blankets being pinned lengthwise with stout safety pins, so that the patient looks rather like an Egyptian mummy. The packing is done sufficiently loosely to allow easy breathing, but tightly enough to prevent movements of arms and legs. For efficient packing more than one nurse is desirable if the patient is at all obstreperous.

For the usually less aggressive motor disturbances in adults following encephalitis, which may intefere seriously with sleep—conic spasms of the limbs, for example—the *continuous tub* has been tried (in which the patient can remain for several hours if necessary with the water at a constant temperature), but not with much success. It has lately been the fashion to instal continuous-tub equipment in mental hospitals. Continuous-tubs are undoubtedly useful, but in my experience—and others who have tried them have the same opinion—their application is much more limited than their advocates would have us believe. The patients for whom one would most like to use them—namely, the very excited patients—are precisely those who are too restless to be manageable in the bath, without a struggle which nullifies the effect intended. And in other types of patient the effect in insomnia is often trifling.

The methods of treatment for the *second group of insomnias*—those due to *external irritation*—are obvious. But a caution is perhaps justified. A great many neurotic patients attribute their insomnia—or much of it—to noise. In hospital, or in a nursing home, they find themselves always in what they regard as a specially noisy part of the building. It is a safe rule, with few exceptions, to disregard the complaints of such patients to the extent of refusing to move them to another room or bed, unless the disturbance is very clear to others. " One hears only the noises one listens for," and the insomnia in these cases depends not on noise but on anxious expectancy of it. To change the room is only to admit that it is noise that is keeping the neurotic patient awake, and this is almost always an erroneous belief.

Insomnia from Mental Causes—

It should be realised that the mental causes of insomnia are in themselves various. Usually in descriptions of treatment what is emphasised is the different types of sleep disturbance that may occur—some patients have difficulty in going to sleep, some awake too early in the morning, some suffer from broken sleep, some sleep lightly or unrefreshingly, or both, and others hardly sleep at all (an hour or two per night). These distinctions have a limited use in determining to some extent whether, if hypnotic drugs become necessary, one shall use a rapidly acting drug like paraldehyde, or a more slowly acting agent like sulphonal. But in practice such differences matter relatively little. What is more important is to discover if possible the kind of mental cause that is at work. The particular mental causes are as numerous as the individuals concerned, but they fall into certain general types, which may be briefly described.

Insomnia originating in mental perturbation is apt to be complicated with physical effects ; the psychological condition that produces the loss of sleep being capable of producing bodily effects such as palpitation and abdominal discomforts of various kinds, which may in themselves keep the patient awake. In some instances the psychological factors seem to work chiefly by this means, producing insomnia via the bodily route.

The most obvious and possibly the commonest psychological factor is overt worry or in more technical jargon " *anxious preoccupation.*" The simplest example of this kind is furnished by the habit some people have of planning their next day's work after they have gone to bed, or of recapitulating the day's events, especially if the latter have gone wrong somewhere. This is a habit which can be voluntarily stopped with little

effort when the patient's attention is drawn to its pernicious consequences.

Very often, however, if after careful consideration you attribute a patient's sleeplessness to worry, he will indignantly deny that he worries at all at night. He will protest that he goes to bed and "thinks of nothing" or only of indifferent topics. This is the kind of person who expects to be able to worry all day and yet to sleep at night simply because he changes the topics of his preoccupation. In point of fact, by thinking of "nothing," by which he means nothing unpleasant, he is making a tremendous effort at repression of his daytime perplexities. and it is the effort at repression that keeps him awake. The sound sleep that follows *the relief of a prolonged anxiety* is an illuminating contrast to the insomnia which results from such an effort of repression. It is clear that the only satisfactory method of treating insomnia of this kind consists in removing the daily habit of anxiety. The detailed treatment is that of the psychoneuroses in general.

In relation to anxious preoccupation as a cause of sleeplessness, it is well to emphasise the existence of a secondary topic of anxiety in nearly every sleepless neurotic patient. There are certain medical beliefs so widespread in the community that they rank almost as folk-lore; the belief in the profound and evil effects of insomnia is one of them. Insanity and even death are believed to be the inevitable sequel of prolonged deprivation of sleep, and few neurotic people are persistently sleepless in whom these apprehensions do not loom large—not that they will necessarily mention their fears. To some patients the possibilities are so terrible that they dread confiding them to the doctor, lest the worst be confirmed. We are however, in a position confidently to reassure them. The experimental data, as we have already seen, show that the effects of insomnia in man are of a trivial nature. Clinically, one can say also with confidence that loss of sleep has never been shown to be a dominant factor in the production of mental illness. Indeed, I have not personally seen a case in which it could be considered anything but a minor factor; the causa causans lies always behind the sleeplessness. It seems that if it were not for the almost universal belief in the catastrophic effect of insomnia, and if it were not also that patients complain so loudly when they do not sleep well—since insomnia occurs chiefly in just those people who make most moan of their discomforts of whatever kind—we should hear much less talk of the fundamental importance of combating sleeplessness and much less discussion of the dangers of hypnotic drugs. One thing emerges clearly however—that one of the important preliminaries in the treatment of almost any case of insomnia is the reassurance of the patient on these fears which, if not proffered, should be warily sought for. Clumsiness in eliciting whether the patient is afraid of insanity may, of course, serve to increase his dread of it.

It is a remarkable fact that a very few anxious patients sleep uncommonly well. This may be interpreted in the way already suggested—that sleep is prolonged as a refuge from their waking troubles.

While most sleepless patients retire to bed in fear that they will not sleep, there are a few, curiously enough, who are afraid that they will. They lie awake because they are afraid to sleep. This is comparatively rare in ordinary practice, but during the war it was not uncommon in "shell-shocked" soldiers, whose dreams of war were so vivid and so distressing that they would willingly have lain awake in order to avoid them. Occasionally in civil practice a patient is encountered in whom there exists a fear of sleep itself. There is sometimes under the surface a fear of death, the patient as the result of certain events in his life or of certain mental impressions, having come to identify sleep and death. Thus one patient, a woman, owed her fear of sleep partly to the fact that her father had died in his sleep, so that a misunderstanding of the association of sleep and death had persisted in her mind. Some neurotic persons fear equally the sleep of ether anæsthesia, again because of its identification with death. I remember a man who suffered severely from insomnia for six weeks before undergoing an operation of gastroenterostomy, not because he feared the operation itself, but because he feared the unconsciousness of anæsthesia—apparently, as it afterwards transpired, in relation to a feeling of guilt for sexual malpractices, for which he believed that he might be punished by illness or actual death.

Another anxious patient lived in dread of an apoplexy, and this fear produced feelings of "deadness" and numbness in his limbs, so that he had to keep moving them to reassure himself that they were not paralysed. In the evenings the paræsthesias reached a crisis, so that he felt that there was only a small fragment of himself left, and he was afraid to sleep lest that also should go. The real cause of his insomnia and of all these symptoms lay, of course, deeper—in a long-standing habit of anxiety about health, inculcated by his mother from early childhood, and in other factors.

It is clear that sleeplessness from the fear of sleep requires the same kind of psychological investigation and treatment as any other anxiety state.

There are cases in which insomnia begins in response to some cause of anxiety, and persists after the original cause of anxiety has disappeared,

the patient having established an anxiety about sleep itself. In such instances, however, one finds that the individual is not ordinarily as stable as he might be, and while reassurance along the lines already indicated may go far, some inquiry into the general attitude to health and other difficulties will often be rewarded by a greater general stability.

Another instance of disturbed sleep, arising from the presence of an anxiety-state, occurs in patients who fall asleep readily enough, but are distressed by awaking in a state of great fear, with palpitation, epigastric sensations, etc., an hour or two after they have gone to sleep. Apart from psychotherapy, and the use of sedative or hypnotic drugs if necessary, it is helpful if the patient knows that he can have a warm drink if he fails to fall asleep quickly again. A thermos flask with hot milk can be left by the bedside for this purpose.

As the result of the continual worry which anxious patients inflict upon themselves, they are unable to feel relaxed physically. Commonly they describe themselves as " all strung up." Muscular relaxation is an important precondition of sleep, as we have seen, and can be aided in various ways. The only radical method is, of course, the relief of the anxiety ; and not much stress is to be laid on the methods about to be described. But the latter are useful as adjuvants, and besides helping towards muscular relaxation, have some suggestive mental effect. The patient can be taught by precept and by means of passive movements to relax himself. It is not a bad plan also in people who can afford the time to do so to order them to take a complete rest in the recumbent position each day after lunch. A glass of beer or stout taken with lunch helps the desired effect of general relaxation. If some sleep follows so much the better. Many patients fear that if they sleep during the day they will not so readily sleep at night. Nothing could be more mistaken. The comparative peacefulness that often ensues after such a sleep—the relaxation produced, far beyond anything attainable while awake, and the confidence engendered—go far towards helping the patient to sleep at night.

Other commonly used methods of inducing relaxation are the warm bath and gentle massage. Neither of them is uniformly helpful. Some people are made more uneasy by them than they were before. The bath should be kept warm—at 100–101°—and the patient should remain in it for 15 to 20 minutes. Massage, if it be used, should be of the gentle " effleurage " kind.

The other simpler methods for persuading sleep, such as reading in bed, have a narrow practical application. Some find them helpful. It is a matter of individual peculiarity. Devices like " counting sheep," or anything involving evident mental effort of any kind, are to be vehemently discouraged. They are merely quasi-mechanical tricks for repressing unpleasant thoughts. Someone has remarked that the difficulty in inducing sleep is that by a voluntary act one tries to produce an involuntary condition. But there is no volition in going to sleep after one has placed oneself in the most favourable conditions that the environment of the moment may afford. One lies down, lets one's muscles relax and one's thoughts wander, and volition ceases. Sleep follows naturally in a short time. The normal person does not will himself to sleep. He allows himself to do so. His difficulty in ordinarily favourable conditions is not in going to sleep but in keeping awake. Everyone has noticed that in falling to sleep one's thoughts are cursory and disconnected. The sleepless person should imitate this, relaxing his thoughts as well as his limbs, thinking of anything provided it does not involve definite planning or vivid recapitulation of past events and the like. The essence of the matter is to avoid effort, letting one's thoughts be as disconnected as they please.

Another cause of insomnia, and especially of difficulty in going to sleep, fortunately not nearly so common as those already discussed, arises in the obsessive-compulsive type of psychoneurotics. In a mild form the kind of anxious pre-occupation involved occurs to all of us—as when we go to bed and become uneasy whether we have extinguished the gas or have closed the bedroom door properly. Sometimes we have reluctantly to get up again to make sure. A glance reassures us and we get into bed again with mingled relief and shame at our weakness. But the truly obsessive-compulsive patient has a much harder task to obtain relief. He usually has to go through an elaborate ritual before he can compose himself at all ; and the ritual may have to be performed again and again in the course of the same night. For example, a certain patient had to place his shoes always at right angles to the wall, and had to get up several times to reassure himself that they were correctly placed in the perpendicular. If anyone passing along the corridor outside his bedroom accidentally disarranged his shoes, and the patient overheard the accident, he had to rise again to restore them to their original position. Similarly, he had to have his clothes arranged in a certain way on a chair, and nothing might be placed in his bedroom in such a position that it might by the remotest chance fall during the night. Hence, his brushes, etc., were placed carefully away from the edge of the dressing table. This outer rectitude was in part a compensation for an overwhelming sense of guilt, which itself

disturbed his sleep also in a more direct fashion. Further, he might not compose himself to sleep until he had said his prayers exactly to his satisfaction—and this might involve repetitions lasting many hours, as he had to be word-perfect, and the wrong words would insist on cropping up. Such a condition is not very rare. The only sound method of tackling it is by psychological analysis, but this does not always succeed, and in such a case, or while psychotherapy is being proceeded with, other measures—including hypnotic drugs—may have to be resorted to.

It is very uncommon to meet with *deprivation of sleep as a malingering device*, but in the late war there were instances where men already in hospital with "shell shock," and knowing that insomnia was considered a bar to returning to the front, kept themselves awake for a considerable portion of the night by a voluntary effort.

In the *psychoses*, the insomnia which is so frequent is determined by several of a variety of factors. It may be part of a general excitement, and follows naturally from the mental over-activity and disregard of the need for rest and sleep. It occurs also as one of the outstanding symptoms of many depressions, partly the result of the unhealthy mode of life led by such patients—lack of exercise, discomfort arising from obstinate constipation, etc.—and partly the outcome of the incessant depressive or anxious preoccupation. The motor restlessness that accompanies so many psychotic conditions contributes to insomnia. The nature of the mental content—delusions and hallucinations—is frequently also a contributing or even the principal cause. It is important to bear in mind that the very weirdness of the psychotic's subjective experiences may be a sufficient cause of sleeplessness, and that auditory hallucinations especially, which many patients do not readily mention, may play an effective rôle in preventing sleep. A young man who had complained of inability to sleep, which had been attributed to "neurasthenia," was found on admission to hospital to be continually hearing voices which called him opprobrious names. He had been considerably worried, having contracted a secret marriage. The hallucinations were the direct outcome of his feeling of guilty responsibility about this, and he did not confide their existence till specially questioned on the matter. The failure to inquire for such a cause of insomnia, especially in a case where the other symptoms arouse a suspicion of the existence, may cause an important point in diagnosis to be missed, and lead to faulty treatment. The patient mentioned recovered completely after he had confided the circumstances of his marriage, and had the union recognised and accepted by his parents.

Apprehensive delusional expectations can also serve to keep a psychotic patient awake—if he expects to be assaulted in the night, or to be poisoned or tortured or any other of the many gruesome possibilities which involutional melancholic, paranoid, and paranoid schizophrenic patients are especially likely to envisage. The methods of treatment suggest themselves according to the circumstances of the individual—*e.g.*, attention to general bodily hygiene, the continuous tub or the warm pack for restlessness, and hypnotic drugs to ensure that at least a minimum of sleep is obtained. The psychotic forms an impressive contrast in many cases to psychoneurotics in that the amount of sleep he gets has to be recorded as far as possible by those attending him, for often, unlike the neurotic, he does not think of complaining even if his unaided sleep dwindles almost to nothing. It has been found helpful, both in calming restlessness and in favouring sleep, to nurse patients with prolonged psychotic illness as far as possible in the open air—verandahs being usually provided in mental hospitals for the purpose. Direct psycho-therapeutic approach is not possible in the acute psychotic conditions, and even where the patient's co-operation can be to some extent obtained, has a very limited application, at least as far as direct influence on symptoms is concerned.

The methods of treatment for the insomnias arising from mental causes can therefore be summarised as follows :—

1. Psychotherapy, which, of course, enters into most of the applications of the other methods also. By psychotherapy is meant such simple measures as explanation and reassurance, persuasion and suggestion (following some judicious psychological exploration). If these simple methods fail, hypnosis and more elaborate psychological analysis, which may or may not be of a psychoanalytic kind, are best left to those who are intimately acquainted with such measures, since they can easily be dangerous in the sense that a major operation would be in the hands of anyone not accustomed to performing it.

2. General hygienic methods. These include attention to the general health, the inculcation of sensible habits of work, play, rest, smoking and drinking, suited to the individual requirements. In particular so many patients deliberately attempt to tire themselves in order—fallaciously—to ensure sleep, that advice on the matter is often useful. I have known a patient walk the country till 2 or 3 a.m. in this vain hope.

3. Physiotherapeutic methods. Massage, baths, continuous tubs, etc.

4. Sedative and hypnotic drugs.

(4) *The Use of Hypnotic Drugs*—

This is one of the most important chapters of our problem, not only because of their undisputed efficiency in producing sleep, but because of the divergence—one might say the passionate divergence—of opinion on the effects and on the indications for employing them. Moreover, the general public has heard so much about them—and much more about their alleged harmfulness than about their benefits—and have received such confusing and contradicting instruction from medical men on the subject, that in prescribing a hypnotic the doctor at once raises doubts in the patient's mind—doubts which by their very existence tend to lessen the effect of the hypnotic upon him.

The following discussion is confined to the indications for the use of hypnotic drugs in sleeplessness associated with mental disturbance of whatever kind; which is, after all, the commonest indication for their use.

In general, these rules should be observed in prescribing hypnotic drugs.

1. Never use hypnotic drugs alone, but always in combination with other methods.

2. Use hypnotics—only when the other methods tabulated above have failed in themselves to procure sleep.

3. When these methods are not answering do not hesitate to prescribe drugs till the patient is miserably uncomfortable and thoroughly frightened about his insomnia. A stitch in time may indeed save nine in preventing the formation of a sleepless habit, although probably not in preventing insanity by means of hypnotics in any direct fashion as is sometimes alleged.

4. Always in prescribing a hypnotic inquire into the patient's attitude to hypnotic drugs—"dope" as he so often calls it, and believes it to be—and give explanatory reassurances about their effects and the question of possible addiction, since these are fears which are usually in the patient's mind when he takes a hypnotic drug. They will be discussed below.

The fourth rule is concerned with a specially important point at the present time. Just as the public who are our patients have been taught to dread the effects of sleeplessness, so they have learned to hold in horror the use of hypnotic drugs. It is true that it is well that they should be chary of using them, as they should be chary of using any medicine which may have to be employed repeatedly—for example, purgatives in constipation. And special self-restraint is necessary where a drug offers an easy, quick and comfortable way of getting rid of a troublesome symptom. But this can be achieved without dwelling on the supposed—and, as we shall see, doubtfully supposed—evil effects of hypnotic drugs. The dread of these effects has been fostered to an extent that tends to stultify in many patients the use of such remedies. The reasons for this general apprehension are best discussed in relation to the particular drugs employed.

The hypnotics most generally used are:—

1. Chloral and its allies;
2. The sulphone group (sulphonal and methylsulphonal or trional);
3. The barbitone group (medinal, veronal, luminal, etc.);
4. Paraldehyde;
5. Hyoscine.

I omit opium from this discussion as its use should be limited to conditions where physical pain is the chief obstacle to sleep, and should never be given as a hypnotic only. Hyoscine is used rarely and only for patients not manageable by other means, and extremely restless and excited so that they tend to wear themselves out or actually inflict physical damage on themselves. It has the advantage of being given hypodermically, and is therefore readily administered to an unco-operative or actively resisting patient. Its use is not unattended with danger, both from the patient's idiosyncrasy and from the difficulty in pharmacological standardisation of the dose. I have once seen alarming effects from gr. 1/100 hypodermically, which is the usual dose. In this case collapse ensued, with a very slow pulse, respiration 6 per minute, and clonic jerkings of the limbs. But such sequelæ are rare. Hyoscine should never be used for the ordinary forms of insomnia, and it does not require discussion in this connection.

Of the remaining four groups the barbitone group is at present the most popular for several reasons—the various preparations are not unpleasant to take, sleep is induced rapidly, toxic effects are uncommon with ordinary doses, although they do occasionally occur, and there are no unpleasant after-effects, except perhaps some drowsiness and sluggishness in the morning. My impresssion is that they ought to be used only as occasional hypnotics in old people, or in people with kidney disease, as in these two classes of patient, on account of difficulty in excretion, they are apt to accumulate in the system and so give rise to toxic effects.

Since it is round the barbitone group that most of the controversy on hypnotics has recently been waged, and since the views expressed on one side of the controversy are typical of what the public are asked to believe, it is useful to review the discussion in this place.

It has been urged against the use of the barbitone group, and also of the sulphonal series of drugs, that (*a*) they are poisonous to man (inferentially in ordinary doses), (*b*) that they are habit-forming, *i.e.*, that persons who begin by using them end

by abusing them, taking them constantly, in excess of what is medically indicated, probably in increasing doses, and in response to a craving which the drugs induce, and (*c*) that they are a frequent means of suicide. In support of this contention animal experiments have been adduced to show that medinal and its allies are toxic to the central nervous system, producing degenerative lesions therein. The question of *toxicity* can be dealt with at once. No one denies that in large doses the barbitone-derivatives are poisonous or even lethal to man; but so is Easton's syrup. There are also a few persons who show an idiosyncratic reaction, developing especially cerebellar symptoms in response to moderate doses. Nystagmus, diplopia, vertigo and ataxia have followed a daily dose of 10 grains for a week or two. But in a fairly numerous experience of the administration of barbitone compounds, I have seen these symptoms only twice, and then in elderly people. Rashes occasionally occur, but they are certainly very uncommon. As for the animal experiments mentioned, they are at once disposed of by the facts. The cats and rabbits utilised were given relatively high doses, some of them receiving in 6 weeks proportionately as much as would be taken, in doses of 5 grains a day, by a man in 40 years! Moreover, even after doses of this order of magnitude if the animals were allowed to recover instead of being autopsied they recovered completely. Finally, it has been shown, since the experiments were published, that the so-called degenerative changes that were described occur in apparently normal untreated animals of the same species. It can be concluded therefore that for practical purposes, except for persons with an idiosyncrasy, the toxic effect of ordinary doses of the members of the barbitone group can be disregarded. There is one exception to this rule. There is evidence that the persistent use of luminal can produce harmful effects in the central nervous system. It has been noticed that in epileptics who have been treated with this drug over a long period, the convulsions may return in greater frequency and severity after the drug is withdrawn; but it is possible that this was due to the use of excessively large doses. Two grains of luminal in 24 hours is about the maximum that should be given over a long period.

As for *addiction*, it certainly does occur. It is, of course, impossible to determine even approximately the number of persons addicted to veronal, etc. By ransacking the literature of this and other countries for 25 years, only 400 recorded cases have been unearthed, which does not seem a great number over so long a time and over so wide an area as the civilised world. As far as clinical experience enables us to judge, the total number cannot be large. As there is no stimulating pleasurable effect from these drugs comparable to that obtainable from morphine and cocaine, it is extremely unlikely that the barbitone group will ever lead to anything like the same amount of addiction as in the case of morphine. The best prophylactic of addiction is the careful prescription of the drug. Even with morphine it is found that a very considerable percentage of its addicts first began the habit when the drug was prescribed for the relief of some definite pain, and perhaps relatively more often when a doctor has begun by prescribing it for himself. Doctors are as a class proportionately the most frequent of drug addicts. Continuous drug users are recruited as a rule from among unstable psychopathic individuals—and by this is not meant the ordinary psychoneurotic, but the emotionally unstable, unreliable personality whose drug taking is a symptom of his general deficiency of temperament and character. It is therefore clear that by exercising discretion in prescribing a hypnotic drug, especially in persons unstable in the sense described, and by insisting on general medical supervision in all cases while the indication for its use remains in any degree, the risk of addiction can be avoided. The medical supervision required in many cases may be nothing more than a regular weekly visit, or even much less often when the patient is well known to his doctor. It is useful when there is any doubt of the patient's discretion to entrust the custody of the supply and its administration to a trustworthy relative.

The third contention, that veronal and its allies are a ready means of suicide, has two aspects. In the first place it is contended that the prescription of veronal leads to addiction, and that addiction leads finally to the taking of a lethal dose, the suicidal climax being held to be caused by the habit of taking the drug. The problem of addiction itself we have already briefly discussed. As to addiction being the cause of suicide, it can safely be said that suicide and addiction are alike the symptoms of an underlying defect of personality and that in no sense did the habit *cause* the suicide. Veronal in ordinary doses does not produce mental illness. The prevention of such suicides does not lie in merely withholding the drug but in dealing with the fundamental instability of the individual taking it.

The other part of the third contention is this, that the barbitone compounds being procurable by anyone who cares to enter a chemist's shop and ask for them, the means of suicide are made too easily accessible. It is, probably, true that most people seeking a means of suicide, unless they be very abnormal indeed, will seek a method that is both as comfortable to employ and as conveniently procured as may be. The hypnotic drugs fulfil the first of these conditions, and so long as they are not placed on the official list of dangerous drugs—as I hope they will not be—they

fulfil the second also. But so also does what is probably the most popular means of suicide of all, namely, coal gas, and if for the reasons stated hypnotic drugs are to be scheduled as dangerous drugs, what are we to do about coal gas? Has the latter to be rationed likewise and made obtainable only on medical prescription? The real point is, however, what influence does the accessibility of hypnotic drugs exercise on the number of suicides per annum? There are those who point to the Registrar-General's statistics, which show that in 1924 the number of recorded suicides with veronal was 8, and in 1925 it rose suddenly to 25. (In 1914 it was 30, and in 1918, before the temporary restrictions on the sale of these drugs under the Emergency Regulations (Poisons Schedule) of the War, it was 12. Placing them on the schedule reduced the number of suicides by their means to 6 in 1919.) But in the same two years, 1924–25, the total number of suicides rose by 9 per 1,000,000 living—an absolute total of over 300. The increase in the number of suicides by coal gas alone accounted for more than half of the total increase. Therefore while the total number of suicides from overdoses of the barbituric acid group rose by 17, the number of persons employing for coal gas the same purpose, and with success, rose by about 180. It can therefore hardly be claimed that the accessibility of these hypnotic drugs has increased the total suicide rate. People will continue to attempt suicide no matter what facilities are or are not available, but to lay the blame for the disaster at the door of the means employed is a curious reversal of causal reasoning. Even if it be shown in future years that the increase in the suicide rate is significantly related to the prescription or other accessibility of hypnotic drugs, it remains necessary to consider whether the many who can benefit from their use ought to be sacrificed to the few who abuse them. The problem of insomnia is a sufficiently difficult one without having a very useful therapeutic method branded as "dangerous." The vast majority of patients who suffer from sleeplessness are more or less anxious; to tell them that the means used to combat the malady are in themselves pernicious is not merely contrary to general experience, it is definitely harmful to the patient in question, and counteracts considerably the good that the methods employed are expected to achieve.

Administration of the Barbituric Acid Compounds—

Taking medinal—sodium-veronal—as the typical and most generally useful hypnotic of the group, its chief advantage over veronal itself being its greater solubility in water, the dose that one should begin with in an ordinary case of sleeplessness where the use of hypnotics has been decided upon, is 10 grains. This is often more than is actually necessary except in very distressed people or in long-continued insomnia, where other drugs have already been tried. But it is essential to gain the patient's confidence from the start, and it is therefore much wiser to make certain of sleep the first night the drug is tried than to begin with smaller doses of 5 or 7½ grains, which may fail. The failure of small doses shakes the patient's belief in the drug and in the doctor, and so entails a bigger dose than ever for success the following night. Sleep having been obtained for a night or two, it is usually possible in an ordinarily anxious patient to begin to reduce the doses first to 7½ grains and then to 5. This is best done without the patient's knowledge. A flavouring agent like syrup of orange should always be prescribed with the hypnotic. This serves two purposes: (*a*) it prevents the patient knowing exactly the drug he is getting, which is often useful—a blind faith is often stronger than a familiar one; (*b*) it also prevents his estimating from the intensity of the taste that his dose has been reduced—dilution with water up to a constant volume being enjoined on the nurse, so that the patient may not have this means of recognising a reduction in strength. After a habit of sleep has been thus re-established—it may take only days or several weeks—the patient should be encouraged to exercise his own control. The draught may be left by his bedside with instructions that he may take it if he does not sleep within an hour or so of going to bed. He should be instructed not to wait long before taking it, if he finds it necessary to do so, since to take a hypnotic in the small hours means inconvenient drowsiness when it is time to get up next morning. It can also be pointed out to the patient after a time that his dose has been reduced, and that therefore the sleep he obtains becomes increasingly an unaided one. This revelation should not be made too soon, otherwise the patient simply begins to fear that the reduced dose will not be efficacious. At the time of withdrawal, as patients are apt to be frightened by the idea of losing several nights sleep in succession, they should be assured that they need never do so; that if they sleep badly, say, for two mights in succession, the sleep will be assured the following night by means of a hypnotic dose. A timely intervention, even for one night, will prevent a relapse by allaying anxiety, and the mere promise of such intervention may forestall the necessity for it.

An important factor in the success of hypnotic drugs is that their action helps the patient to get away from his excessive preoccupation with the problem, "Will I sleep to-night?" He knows that his sleep can always be assured, if it will not come spontaneously. Further, it has been noticed that in some patients the drug acts as a kind of specific

for anxiety and for this purpose medinal has sometimes been given in divided doses of gr. ii ss. throughout the day. But its use in this way should be confined to the anxiety of certain psychoses not directly assailable by psychotherapy.

In the meantime, of course, every attempt must be made to build up the patient's interests in other directions—in work and recreation—and the importance of insomnia minimised. Concurrently also, of course, should go the psychotherapeutic unravelling of the mental condition that produced the insomnia. In this connection, however, several disadvantages appear in the use of hypnotics. A patient made comfortable with a hypnotic is apt to feel less eager to solve the problems that were producing the mental discomfort that led to insomnia. It has also been remarked (T. A. Ross) that patients using hypnotics dream less than formerly, and so a source of psychological information that can be very valuable is lost.

Adalin is a useful drug of this group, not so powerful as medinal or veronal, supposedly because of the absence in its composition of the cyclic component. It is said to be practically non-toxic, even in very large doses, and therefore can be prescribed with greater liberty to the unstable variety of patient. The usual dose is 10 grains.

The general remarks made on the barbitone group apply also to the administration of the other hypnotics. Sulphonal and methyl-sulphonal are on the whole less satisfactory than the barbitone compounds; they take longer to act (being less soluble), are less certain in their action, and sulphonal at least tends to be excreted very slowly, with the result that it readily accumulates in the body. The long-continued administration of the latter has in rare instances given rise to a cumulative toxæmia, with hæmatoporphyrinuria heralding a fatal result. This group is not at present generally used. Sulphonal, gr. xx, twice a day, used to be a favourite prescription for excited patients in mental hospitals who were continuously excited.

Paraldehyde is useful when a quick and drastic action is required or when the barbitone group is unsuitable from idiosyncrasy, or has failed. It has the advantage of acting very quickly and of producing a deep sleep. But its action is apt to be brief, the patient waking up in the early hours of the morning and being unable to go to sleep again. It has an odour and a taste that to most people are unpleasant, and it has been held therefore to be unlikely to give rise to addiction to its use. Nevertheless cases of addiction are met with, the habitué quite liking the flavour and aroma; but they are few. The drug is excreted from the lungs next day, and the odour is easily perceptible in the breath, which is an advantage in some ways. Although it is said to be non-toxic except in very large non-medicinal doses it is not very often used. I have known an addict who claimed to take 4 ounces in the 24 hours. The dose commonly used is 2 drams. More is rarely necessary, and less is somehow apt not to be satisfactory, perhaps because it is usually tried after as much as gr. xv. of medinal has failed. In such doses it has the appearance of being a drastic hypnotic, producing a deep sleep with great rapidity. In a delirious or otherwise excited patient in whom sleep is essential—*e.g.*, in delirium tremens—it is possible to repeat the dose within an hour or two. Paraldehyde is not a cardiac depressant, unlike chloral, which also has the advantage of acting quickly.

Chloral has fallen into disrepute, rather undeservedly, chiefly because it is a cardiac depressant. But used in persons with a sound myocardium it is sometimes a very useful drug, being less drastic in its action than paraldehyde and apparently more lasting. It should not be used continuously over a long period on account of its depressive action and the consequent feeling of inertia on the morning after, but it forms a useful alternative to other hypnotics. Combined with bromide to reinforce and prolong its action, it has been a good deal used in the prolonged insomnia of excited psychotics.

The *pharmacological action* of all these drugs is similar, depending—it is supposed—on their solubility in lipoids. Hence they are found in maximum concentration in the central nervous system. Lipoids tend to be absorbed at cell-surfaces, in virtue of their capacity for reducing surface-tension. It is therefore likely that when narcotic drugs become dissolved in them the effect is to reduce the permeability of the surface-membrane of the cell, which would account for some of the phenomena of sleep—the raising of the sensory threshold and the possibly increased electrical resistance described at the beginning of this lecture as occurring in sleep, whether that sleep be natural or produced by narcotic drugs.

Speciality.

Messrs. J. & A. CHURCHILL, 40, Gloucester Place, Portman Square, W.1.

THE firm of Messrs. J. & A. Churchill (founded 1825), publishers of the *Medical Directory*, etc., have acquired new premises at 39 and 40, Gloucester Place, Portman Square.

They are larger, more serviceable and easier of access to most of their authors, among whom are included a number of famous medical and scientific men.

Change of Address.

H. A. Harris, Fay Gate, Chelmsford.

L. J. Barford, M.B., B.Ch., Heather Lodge, Redhill.

S. V. Strong, M.B., B.S., 55, Alma Road, Windsor. 'Phone: Windsor 395.

JOINT MEETING OF THE PHYSICAL & PHYSIOLOGICAL SOCIETIES

Papers read on November 1st, 1927.

2.—The Pathology of the Lymphatic System.

By Mr. S. Shone.

MR. CHAIRMAN AND GENTLEMEN,—Mr. Simpson has outlined for you the physiology of the lymphatic system. I must, however, confess that my task, in opening the discussion from the pathological aspect, is a much less enviable one. For, whereas it is possible to give a more or less continued account of the lymphatic system in health, it is plainly an impossibility to bring within the narrow limits of the time at my disposal a description of the many diseases affecting lymph glands and vessels.

I propose, therefore, to make no reference, beyond a passing one, to conditions which are familiar to all of you, such as lymphangitis and the various forms of adenitis. I have arbitrarily chosen four sections of the subject because, I think, they will be productive both of interest and discussion. These are status lymphaticus, the various forms of glandular enlargement, elephantiasis, and, finally, the spread of malignant disease via the lymphatic vessels.

(1) *Status Lymphaticus*—

Although in recent years it has become somewhat fashionable to regard a verdict of death from status lymphaticus with derision, yet there is considerable clinical evidence that this condition is a definite entity. Status thymico-lymphaticus, as the fully developed condition is designated, consists of a generalised swelling of the lymphoid tissues and persistence or enlargement of the thymus. It has been pointed out by observers that the lymphoid structures in childhood are proportionately more developed than in adult life; as the individual increases in maturity this disproportion becomes less and less obvious. Failure to maintain this adjustment would therefore seem to indicate some form of metabolic upset, and, indeed, it has long been considered that this lymphatic derangement is but an indication of an existing constitutional inferiority, both sexual and physical. The patient is asthenic in build, has a skin which is of fine texture and very shapely limbs; the skeletal and heart muscles are flabby and poorly developed genitals are the rule. The latter is in accord with the physiological observation that the development of the thymus and of the testis bear an inverse ratio to each other. The subjects of this condition are prone to fall a prey to inter-current infections, and particularly to tuberculosis. According to Leadingham[1] re-current asthmatic attacks and laryngeal spasms are classical symptoms.

Excitement, or a slight shock, which would have an insignificant effect on normal individuals, often appears as the only obvious cause of death; anæsthesia may also be responsible for an abrupt termination to life. The most obvious post mortem changes, apart from the lymphatic and thymic enlargements, are the narrowness of the aorta, the smallness of the heart, and, usually, a hypoplasia of the suprarenals.

Attempts at explaining the cause of death have been numerous, and various theories have been based on post-mortem findings. Mechanical pressure on the trachea by the enlarged thymus has been suggested as the real factor, but obviously the suddenness of death is not thus satisfactorily accounted for. Over-function of the thymus has been held responsible by some, although it is not clear what substance this organ normally produces which, circulated in excess, is capable of producing sudden death. Another observer postulated a nucleo protein liberated from necrosed germinal follicles as the true cause. Still another considered death to be due to an anaphylactic reaction. Adrenal exhaustion has been thought by some to be a potent factor, and it is to a consideration of this question that I particularly wish to draw your attention.

Maclean and Sullivan[2] recently estimated the blood sugars half-an-hour before death in three cases in which the anatomical diagnosis at autopsy was status thymico-lymphaticus. They found a considerable degree of hypoglycæmia. As their patients had died in convulsions, controls were performed on :—

(*a*) Cases of convulsions excited by conditions other than status lymphaticus;

(*b*) Cases of enlargement of the thymus as shown by X-rays; and

(*c*) Cases where the blood sugar was taken half-an-hour before death in patients dying from conditions other than status lymphaticus.

In all these controls the blood sugars were normal or within normal limits.

Now, many observers have found that suprarenal insufficiency may cause a low blood sugar—in Addison's disease, for instance, such a condition exists. Cannon[3] has shown that the sympathetic suprarenal mechanism is protective against a hypoglycæmia. Reduction of the blood sugar below a level of 70–80 mg. per 100 c.c. calls into action a sympathetic suprarenal factor which tends to prevent a further fall.

Further, the suprarenals, as stated, are frequently hypoplastic in status lymphaticus. In 1905 Norris[4] first observed the connection between Addison's disease and status lymphaticus, and that thymic enlargement is very often associated with diseased suprarenals was definitely shown by Wiesel[5] and others. Finally, a condition closely resembling status lymphaticus has been produced experimentally after removal of the suprarenals.

Maclean and Sullivan, after consideration of these facts, declare that acute suprarenal insufficiency is the cause of death in status lymphaticus. The slight shock, which may be the only appreciable cause of death, would, in normal people, produce a hyperglycæmia for which, according to Cannon,[6] the suprarenals are responsible. A hypoglycæmia obviously suggests a failure of those organs to fulfil their normal function. Moreover, acute suprarenal insufficiency has been shown capable of causing sudden death or collapse (Lavenson[7]), and is especially seen in the cases of suprarenal hæmorrhage occurring in newly-born infants.

We have quoted Maclean and Sullivan's observations at some length because it appears to us to open a question the answer to which will in all probability solve the problem of status lymphaticus —what is the relationship between the hyperplasia of lymphoid tissue and thymus and hypoplasia of the chromaffin organs ?

Lymph Gland Enlargements—

The pathology of the various forms of lymph gland enlargement is extremely confusing, especially with regard to the methods employed in classification. There are certain classical types of hyperplasia, but it is the exception rather than the rule to find cases which will definitely fit into one or other category ; those which partake of the characteristics of two or more divisions are far more common. Some pathologists regard the presence of a lymphocytosis as characteristic of some particular disease, whilst others deny the specificity of this condition and consider the leukæmic state of the blood as a phase upon which the intrinsic nature of the disease does not depend. Cohnheim's " pseudo-leukæmia " or " Aleukæmic leukæmia " is a case in point. Nobody can deny that the terms are very unscientific ; even MacCallum admits that it is not possible in sections of lymphoid tissues to find anything which in one case makes the escape of cells impossible and in another facilitates it. Further, most pathologists admit that in pseudo-leukæmia, leukæmic or subleukæmic phases occur, especially before death (Sternberg).

MacCallum divides hyperplasia of the lymphoid tissues into diseases with leukæmic blood and those without leukæmic blood. His table is as follows :—

TABLE I

MACCALLUM'S CLASSIFICATION OF LYMPH GLAND ENLARGEMENTS

A—With Leukæmic Blood—	
(i) With swelling of lymphoid tissue and lymphoid infiltration of organs	Acute and Chronic lymphatic leukæmia
(ii) With tumours originating in various situations and invading tissues	Leucosarcoma
B—Without Leukæmic Blood—	
(iii) With tumours invading bone marrow	Lymphoid myeloma
(iv) With general swelling of lymphoid tissue	Pseudo leukæmia
(v) With regional invasive tumour-like growth	Lymphosarcoma
(vi) With stigmata of general maldevelopment	Status lymphaticus

He also includes amongst these diseases lymphogranulomatosis, or Hodgkin's disease, although he states that it is probably not related—a view which is by no means universally held.

MacCallum is extremely moderate in the number of diseases of the lymphoid organs that he discusses, for altogether there are nearly 50 mentioned in the literature, the great majority of which are mere repetitions and meaningless terms. Probably the true cause of the confusion is the unwillingness to relegate the leukæmic part of the picture to the oblivion which it appears to merit and to concentrate more on the histopathological aspect. For, as Dickinson and Lwow[8] remarked in a recent paper in the *Lancet*, " as long as the primary cause . . . remains unsolved, the most important guiding points in the classification of these diseases should . . . be the appearance of the histological picture of the different organs."

Probably the best way of considering the lymphatic hyperplasias is to attempt some form of rational classification and incidentally to discuss the various forms as they come under observation.

Fox and Farley,[9] of Philadelphia, stressed the fact that such a classification might be based upon hyperplasia of each or any of the three elements which contribute towards the make-up of a lymph gland, namely, the lymphoid cells, the endothelial cells of the sinuses and perivascular spaces, and the reticulum cells and fibres. Hyperplasia of the elements may be of the nature of an orderly or "restrained" growth or may entirely transgress normal confines, that is, it may be benign or malignant. Inflammation, they considered a mixture of normal and adventitious elements, the end result being an attempt to maintain normal relations. They were also obliged to recognise that certain of their cases, while having inflammatory characteristics, showed at the same time a disorderly hyperplasia of certain cells—to these cases they applied the name "Neo-inflammatory." This group, consisting of glands having both neoplastic and inflammatory characteristics, they considered to represent lymphogranuloma or Hodgkin's disease.

TABLE II

Character of Pathological Change	*Clinical Character*	*Pathological Group*	*Specific Varieties*
Hyperplasia	Benign	Lymphoma	Status lymphaticus Lymphadenoma Glandular fever
	Malignant	Leukæmic	Leukæmia Aleukæmia
		Neoplastic	Leucosarcoma Lymphosarcoma Reticular sarcoma Endothelioma
Neo-inflammatory	Malignant	Lymphogranuloma	Cellular Fibrous
Inflammatory	Benign	Adenitis	Simple Purulent Tuberculous Syphilitic

Although we have up to this moment used the term "hyperplasia" to express generally lymph gland enlargement, we shall now have to be more specific and consider the character of the pathological change under the headings "Hyperplasia," "Neo-inflammatory" and "Inflammatory."

Hyperplasia, as we mentioned, may be benign or malignant. Under benign hyperplasia we consider what we may generally term the lymphomas, which include status lymphaticus and lymphadenoma. In status lymphaticus there is a restrained hyperplasia of the lymphoid elements with a preservation of the follicular centres. Lymphadenoma is a term which at one time was considered synonymous with Hodgkin's disease; as the name implies, however, it should be restricted to a tumour of the lymph nodes, that is, one made up of and like lymph nodes, embodying in every degree their peculiar construction. Such a condition is a rare one.

Bridging the gap between benign and malignant hyperplasia is glandular fever, which is peculiar for its acute symptoms. In this respect and in the accompanying lymphocytosis which usually occurs it resembles acute lymphatic leukæmia. Its benignity lies, of course, in the shortness of its duration, and it is considered a hyperplasia rather than an inflammatory change because all three elements are not affected as in adenitis.

The malignant hyperplasias are grouped into the leukæmic and the neoplastic: the former include acute and chronic lymphatic leukæmia and the so-called "aleukæmia." The clinical aspect of the leukæmias we can deal with but briefly—they are systemic diseases characterised by generalised lymph node enlargement, mononuclear infiltrates in the viscera and generally an enlarged spleen. It may, however, be pointed out in passing that those symptoms of acute leukæmia which we are accustomed to consider as connoting its malignancy are stated by Sternberg to be due to a secondary infection and not to the basic leukæmic process. Histologically, none of the three conditions differs essentially from each other. The circulating cells are considered to be larger in acute than in chronic leukæmia. In all these there is an unrestrained hyperplasia of the lymphoid elements within the lymph node—usually the follicular centres are not preserved. The hyperplasia never extends beyond the capsule, although in the later stages it destroys the whole architecture of the gland.

Allied to the leukæmias is leukosarcoma, which, clinically, is a local invasive tumour of lymphoid cells accompanied by a lymphocytosis. Histologically, there is an unrestrained hyperplasia of the lymphoid elements: the capsule is involved. In this respect it differs from the leukæmias, but in all others it is very similar, for, even although it is primarily a local condition, in time it may become a systematic disease.

Lymphosarcoma in its initial stages is also a localised affection, but comparatively early becomes disseminated. The same unrestrained hyperplasia of the lymphoid elements occurs as in the leukæmias and in leukosarcoma and the capsule, as in the latter, is not respected. The characteristic features of this disease are, firstly, the absence of a circulating mononucleosis, and, secondly, the unrestrained hyperplasia of the reticular elements of the nodal architecture.

In reticular sarcoma there is an unrestrained proliferation of the reticular elements and in endothelioma an unchecked overgrowth, both of the endothelial and reticular portions.

In the neo-inflammatory group we place Hodgkin's disease, which is characterised by a progressive enlargement of the lymph glands of the body with secondary involvement of the viscera. From a localised enlargement the disease assumes the proportions of an almost universal swelling; a peculiar type of relapsing fever is described and the condition is associated with no definite abnormality of the blood picture, an anæmia being, however, prominent in the later stages. Pruritus, a brownish pigmentation of the skin, and severe sweating are three peculiar features of the disease; marked cachexia is present in the advanced stage, and death inevitably occurs, either from pressure effects or from secondary infection. The common age incidence for Hodgkin's disease is 20 to 40 years—the male sex is predominantly affected. A special constitutional make-up is considered by some persons to play a part in the development of the disease, individuals with status lymphaticus being supposed particularly susceptible. Other predisposing causes are conditions involving chronic glandular enlargement, and, to an uncertain degree, heredity.

Histologically, Hodgkin's disease appears to be capable of division into two main groups—the cellular and the fibrous. The cellular type exhibits a restrained hyperplasia of the lymphoid, reticular and the endothelial elements, and the presence of giant endothelial cells; that is to say, there is a mixture of inflammatory and neoplastic changes. The fibrous type, which may be but a later stage of the cellular, demonstrates a reasoned overgrowth of the lymphoid and endothelial elements, but an unrestrained hyperplasia of the reticulum, resulting in a coarse fibrosis.

We cannot here enter into a discussion on the most common of all kinds of lymph gland enlargements—the inflammatory forms, which include the simple, the purulent, the tuberculous and the syphilitic. In all, the keynote of the process is an attempt to bring the various elements into the normal anatomical equilibrium; histologically, therefore, a restrained hyperplasia of all the elements of the lymph nodes is to be observed. The various forms of adenitis differ only in chronicity and in the type of reaction to the causative factor.

Before concluding this brief survey of the glandular enlargements, a word might be said of the classification proposed by Pappenheim,[10] who considered only (i) generalised lymphadenosis and (ii) generalised granulomatosis. In the first group there is overgrowth of the lymphoid parenchyma, and in the second proliferation of the interparenchymatous stroma. All forms of adenitis, as well as Hodgkin's disease, would be included under granulomatosis. Lymphadenosis, according to Pappenheim and others, may be leukæmic or aleukæmic, benign or malignant, localised or generalised. Thus, to quote a tangible example, benign generalised leukæmic lymphadenosis would correspond to lymphatic leukæmia, and malignant localised aleukæmic lymphadenosis would be synonymous with lymphosarcoma, and so on. The advantages claimed for this system—and rightly so, we think—are:—

> " (i) That it emphasises the histological changes in each condition;
>
> " (ii) That it shows the common nature of these diseases;
>
> " (iii) And that it shows that there are no class limits between them "—Dickinson and Lwow.

Elephantiasis—

I now wish to pass on to another aspect of the subject and to consider briefly the question of elephantiasis.

Practically all observers agree that the essential features of elephantiasis are (a) a hypertrophy of the skin and subcutaneous tissues, and (*b*) a chronic œdema. The form with which the text books make us familiar is the pachydermatous enlargement of the lower limbs and scrotum, associated with lymphatic blockage by the Filaria sanguinis hominis nocturna. But it is no longer considered that filariasis is the most likely cause of elephantiasis, for many cases can be produced in which filarial infection can be definitely ruled out. Again, mere lymphatic blockage gives rise to œdema, but this in itself is not true elephantiasis. Manson, in his celebrated book on tropical diseases, definitely states that "lymph stasis does not produce elephantiasis." By elephantiasis he means a true hypertrophy of the subcutaneous tissues; that is to say, he cannot conceive that a primary œdema can give rise to cell proliferation. In this he is supported by a tremendous amount of clinical observation of chronic renal and cardiac disease, and apparently by some experimental work also. He, Matas[11] and other authors therefore consider that, for the production of elephantiasis, "inflammation in an area of lymphatic congestion"

is necessary, and they stress the fact that the lymphatic stasis is the initial condition. It is very exceptional to encounter a case of non-filarial elephantiasis in which there is no evidence of a pre-existing lymphangitis, cellulitis or other forms of septic infection. Sistrunk[12] insists that the stagnation of the lymph predisposes to infection by micro-organisms and, following this, a reactive hypertrophy of the connective tissue elements of the skin, subcutaneous tissues and deep aponeuroses occur. The infection is apparently usually a streptococcal one. Matas contends that the incidence of elephantiasis arabum is due not to filariasis chiefly but to the greater risk of skin affections because of exposure of the body to trauma and infection.

On the other hand, there are others who believe that simple lymphatic obstruction may be the cause of persistent œdema, which is not amenable to treatment by elevation, compression, etc. Sampson Handley,[13] by using silkworm gut to replace the occluded and removed lymphatic vessels of the upper limb in mammary carcinoma, has had considerable success in reducing the œdema which is so frequent a feature. This œdema is not venous, since in cases where the axillary vein is excised or compressed by cancerous glands to the point of occlusion, there is no œdema. Hence, the disappearance of the œdema after lymphangioplasty appears to indicate that lymphatic obstruction alone *is* the cause of persistent œdema. This, however, does not explain the subcutaneous connective tissue hypertrophy which is so characteristic.

Kondoleon considers that elephantiasis may be of simple or of severe kind, the former being characterised merely by the lymphatic stasis and the latter by connective tissue proliferation, but, again, no cause is assigned for this hypertrophy, although presumably it is to be inferred that prolonged lymphatic stasis is responsible. On the whole it seems difficult to believe that simple œdema can be a stimulus to tissue formation, whereas frequent bacterial assaults are certainly capable of calling forth such a reaction.

The only treatment which offers any hope at all is purely surgical.

Unfortunately, Handley's operation of introducing new channels has not been successful in the lower limb; all operations are based on the anatomical observation of Sappey,[14] made as long ago as 1874, that there is absolute independence between the superficial and deep lymphatics of the extremities, the barrier being the deep fascia. The first operation was performed by Lanz,[15] who merely made multiple incisions into the fascia lata and carried fascial strips into the marrow of the femur—there was permanent relief of the œdema. Kondoleon[16] extended the operation by removing strips of fascia lata and had considerable success. In his cases he found the lymph stasis to be chiefly at the fascia lata; the layers facing the skin were considerably thickened while the muscle surface was normal.

(4) *Cancer Dissemination*—

Finally, I wish to say a little on the question of cancer dissemination via the lymphatics. It is perhaps true to say that our views on this subject have been revolutionised by the researches of Sampson Handley.[17] Until quite recently it was considered that carcinoma was disseminated by embolism, but that this is not so is sufficiently demonstrated by the facts that:—

(*a*) Certain organs are more liable than others to acquire secondary deposits;
(*b*) The distribution of metastases is not the same in cancers of different organs;
(*c*) Subcutaneous nodules might be expected to occur anywhere on the surface of the body, but do not so occur;
(*d*) The distal portions of the limbs enjoy an immunity from bone metastases, whereas it is just at the extremities that embolism might be expected to occur.

Many years ago Langhans observed that in the region of a cancer the small lymphatics were invaded quite early and extensively well beyond the limits of the actual growth.

In 1889 Heidenhain showed, in many cases of carcinoma of the breast, that lymphatics filled with cancer cells were present on the pectoral fascia. He considered that the process was not one of lymphatic embolism, but a *continuous* growth of the cells along the lymphatic vessels. In spite of this observation the embolic theory held the field until the event of Handley, who resuscitated and elaborated Heidenhain's work.

Permeation is considered to be the "master process of dissemination," but, considering the great importance which is attached to it, it appears surprising that it has remained for so long in the background. This obscurity is thought to be due to the observation that a lymphatic along which cancer cells are growing does not persist unchanged. By their continued growth the cancer cells distend and, finally, burst through the confines of the lymph vessels. Immediately an inflammatory reaction occurs around the lymphatic and the liberated cells, and a round-celled infiltration takes place. Organisation into fibrous tissue ensues and strangulation of the cancer cells follows the replacement of the original lymphatic by a cord of fibrous tissue. To this process the name "perilymphatic fibrosis" has been applied by Handley.

Hence, around a primary growth, three zones of carcinomatous infection may be recognised. The first—that is, the inner zone—is one of secondary nodules ; here the permeated lymphatics are destroyed. The second zone is a narrow one, embodying active perilymphatic fibrosis. The third is the vastly important microscopical growing edge of the tumour. In this last, which may be several inches removed from the primary growth, the lymphatic vessels are crammed with cancer cells, while the actual tissue spaces are entirely free from cancerous involvement.

The process of permeation and perilymphatic fibrosis explains many of the features associated with carcinomata. It accounts, for instance, for the tendency of a cancer to exert traction on surrounding healthy tissue ; it also demonstrates that there exists a natural local curative mechanism which is not, however, successful because fibrosis fails to overcome the spreading edge of permeation. But especially does it explain some of the manifestations intimately associated with mammary carcinoma.

Paget's disease of the nipple, which clinically is a chronic unilateral eczema extremely resistant to treatment, has for many years had a much disputed pathology. It has, however, long been accepted that it is invariably associated with carcinoma of the corresponding breast. The eczema has been considered by some to be due to a discharge from a carcinoma invading the ducts in the region of the nipple ; this, however, cannot be universally true, since in the vast majority of cases there is apparently normal breast tissue separating the skin from the growth. Others have thought that the disease is actually a carcinomatous affection of the epidermis, the growth finally spreading along the galactiferous ducts. But in sections of the skin no trace of cancerous overgrowth is visible. Sampson Handley has put forward the most recent and plausible explanation. He considers that in all cases of Paget's disease a carcinoma, often of the atrophic variety, is already present in the breast tissue. The lymphatics are permeated and many converted into fibrous cords. The result is that the lymphatic return from the region of the areola is disturbed. The eczema is thus merely a manifestation of the disturbance of the lymphatic circulation, and is, moreover, frequently observed in cases of elephantiasis.

In the diagnosis of cancer of the breast much importance is attached to the observation of a condition of the skin known as peau d'orange, in which the orifices of the sebaceous glands are plainly visible and the skin is thick and no longer supple. Contrary to general opinion, peau d'orange is not always due to carcinoma, but may occur in syphilis, tuberculosis or elephantiasis. It has been considered that, in breast cancer, peau d'orange is due to contraction following invasion by growth of the ligaments of Astley Cooper, which attach the breast tissue to the overlying skin. An explanation based on obstruction of lymphatic return from the skin is more probable and due, again, to permeation and fibrosis. Hence, peau d'orange is really due to lymphatic œdema —where the skin is held down by the hair follicles it cannot swell, and the characteristic pits are thus produced.

A later stage of this condition is the so-called cancer en cuirasse or cancerous pachyderma. The skin is leathery and tremendously thickened over a roughly circular area, having the underlying growth at its centre. Again, this is due to lymphatic obstruction and a probable secondary infection giving rise to a condition identical with elephantiasis. The term cancer en cuirasse is really a misnomer until the very last stage of the disease where there is actual cancerous infiltration of the skin.

We have previously mentioned the œdema of the corresponding arm in late mammary carcinoma and its treatment by lymphangioplasty. It remains for us now but to state that the serous effusions, both pleural and peritoneal, which occur in late mammary cancer are also due to permeation of the lymphatic plexuses.

REFERENCES

1. Leadingham, *Med. J. Rec. N.Y.*, 1926, cxxiv, 345–347.
2. Maclean and Sullivan, *Am. J. Med. Sc.*, 1926, 171, 659.
3. Cannon, McIver Bliss, *Am. J. Physiol.*, 1924, 69, 46.
4. Norris, *Johnson's Surgical Diagnosis*, 1920, 3, 704.
5. Wiesel, *Internat'l Clin.*, 1905, 2 Series, 15, 288.
6. Cannon, *Am. J. Physiol.*, 1914, 53, 356.
7. Lavenson, *Arch. Int. Med.*, 1908, 2, 62.
8. Dickinson and Lwow, *Lancet*, Sept. 3, 1927, 489.
9. Fox and Farley, *Am. J. Med. Sc.*, 1923, 166, 170.
10. Pappenheim (quoted by Dickinson and Lwow, see above), *Morphologische Hæmatologie Bd. II Fol. Hæmat.*, 1919.
11. Matas, *Am. J. Trop. Dis. and Prev. Med. Baltimore*, 1923.
12. Sistrunk, *Surg. Clin. N. America, Phila.*, 1921, 1523–1529.
13. Handley, *Br. Med. J.*, 1910, 1, 853, 922.
14. Sappey, *Anatomie, Physiologie, Pathologie des Vaisseaux lymphatiques, Paris*, 1874.
15. Lanz, *Zentralbl. f. Chir. Leipzig*, 1911, 38, 3, 153.
16. Kondoleon, *Munchen med. Wochenschr.*, 1912, 59, 525, 2726 ; *Zentralbl. f. Chir. Leipzig*, 1912, 39, 1922.
17. Handley, *The Breast, Choyce's System of Surgery.*

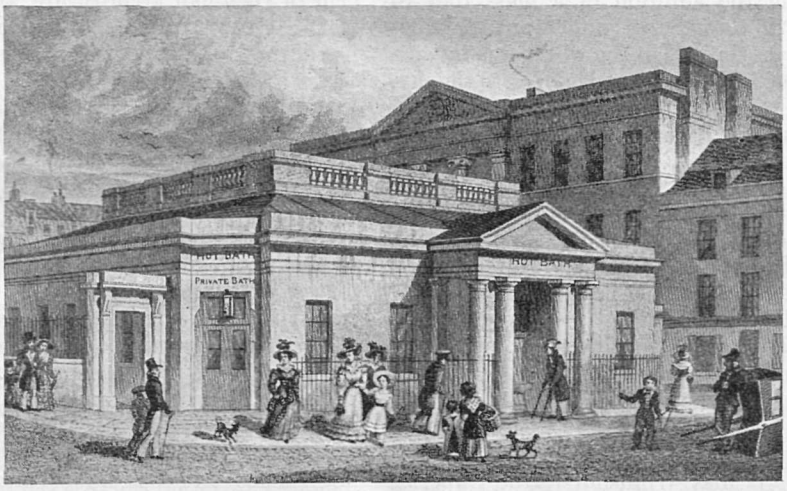
The Old Royal Baths.

THE latest addition to the baths of Bath embodies within its walls a memory of the Middle Ages when the springs were administered by the Benedictine monks of Bath Abbey, the dignity and elegance of the 18th century, the at est scientific methods of treatment and the efficient equipment of to-day.

When Robert of Lewes, third Bishop of Bath, founded the Lazours' Bath, in 1138, attached to a small hospital for lepers, there is little doubt that the Hot Bath, of which this Lazours' Bath was an offshoot, had long been in use. No direct evidence has been discovered of Roman baths actually at this spot, although Roman buildings have been found in close proximity. All through the Middle Ages this was one of the popular baths, its great heat being a source of awe and wonder. Writing in 1542, shortly after the Dissolution of the Monastery, when the control of the baths passed to the city, Leland, in his *Itinerary*, says: "The other Bath is called the Hote Bathe; for a cuming into it Men think that it wold scald the Flesch at the first but after that the Flesch ys warmed it is more tolerable and pleasaunt."

John Wood's planning was ingenious, but particularly difficulty to adapt to modern requirements. The success with which Mr. Alfred J. Taylor, F.R.I.B.A., the architect to the Baths Committee, has achieved the task will be evident. In the small entrance hall many of the original features of the building have been retained, the decoration has been carried out in the strict Georgian manner and a few pieces of original furniture of the period provide interest and comfort for those who may be waiting for their treatment. Furniture of Georgian style has been adopted for the dressing rooms, with broad comfortable day-beds, bright cheerful colours and everything which can help to make the time spent at the baths as pleasant as possible.

Almost under this bath house there rises the hot spring, so named to indicate its high temperature, 120° F., slightly greater even than that of the King's or the Cross Springs. The water will be served for internal use, and it has been found possible, by sinking a small glass-lined well in one of the stone niches, which are a characteristic feature of the building, to obtain the water by



The Hot Bath, as designed by John Wood, 1777.

It is this hot bath, as rebuilt by John Wood, the younger, the celebrated architect of the 18th century, which forms the central portion of the building now being opened. The main lines and the facade of the baths designed by Wood in 1777, have been retained and freed from some later excrescences, and the name by which this establishment has long been known, the Old Royal Baths, will still be used.

natural flow direct from the spring without having recourse to pumping. The water, which is very palatable, differs from the water of the King's Spring, which is served in the Grand Pump Room, chiefly in its smaller proportion of calcium, sodium-sulphate, and iron, and in its larger proportion of sodium chloride.

This new department of the Bathing Establishment has been set apart for intestinal douche

treatment—Plombiéres douches—for which the Bath waters have proved to be particularly suitable. At first used almost entirely in cases of colitis, Plombiéres douches have lately been largely prescribed in the treatment of rheumatic diseases, and their growing use has necessitated the provision of more and more accommodation. Special attention has been given at Bath to the administration of intestinal douches, the staff receiving the most thorough and careful training, and by concentrating the treatment in one building, specially designed and fitted with apparatus embodying every improvement science and experience can suggest the highest possible efficiency will be attained.

No case can be taken without medical advice, and after every treatment a full report is sent to the physician sending the patient. Cases are sent for diagnostic as well as for treatment purposes, and when desired specimens can be sent for examination and report to the Central Laboratory, which almost adjoins this department of the baths.

For the other form of treatment to be given at the Old Royal Baths, the historic hot bath will be used. John Wood's beautiful little pool bath, with its well-proportioned balustrade and graceful carving, has been carefully restored, the only alteration being the addition of a glass roof to enable the bath to be used under any climatic conditions. Even this, when the weather is favourable, may almost all be thrown wide open to the sky.

The treatment, which consists in active and passive re-educative movements, is chiefly used in cases of spastic and flaccid paralysis, and has also been found useful in Parkinsonianism. Experience gained during the war established the efficacy of this method. The object is to allow voluntary exercise to be taken in a medium which will support the limbs, and therefore reduce strain and fatigue. The heat—100° to 101° F.—reduces spasm where present and prevents any feeling of chill, while at the same time the patients are obtaining the benefit of immersion in the mineral water. By means of specially designed lifting and travelling apparatus even helpless patients may, without the slightest discomfort, be raised in the dressing room and carried out over the pool and gently lowered into the water for the movements. Provision is also made for walking exercise in the bath.

This pool bath, with its flow of natural mineral water direct from the spring provides exceptional facilities for the treatment, which is only administered by specially trained attendants who have had considerable experience.

The opening of the Old Royal Baths provides much needed additional accommodation, delightful in its quiet and restful comfort, with the most perfect installation for administering the treatments it is possible to obtain ; it preserves a little gem of Georgian architecture, the work of one of Bath's greatest architects, and it perpetuates the use of the Hot Spring, with its history of a thousand years of healing.

Nursing News.

IT is a most difficult thing for a nurse in training to decide what branch of her profession to take up when she has passed her Final State Examination. The details of hospital posts and private nursing posts are known to all nurses, but other branches of our work are less well understood.

On Friday, November 11th, in the Nurses' Home, Matron enabled the nurses at Guy's to gain an insight into the life of the " Queen's Nurses " by arranging for Miss Wilmshurst, the Superintendent of the Queen's Nurses' Training Home at 23, Bloomsbury Square, W.C.1, to give a short account of their work and training. This District Home is the first " Queen's "—or " Jubilee " as it used to be called—Nurses' Training Home in England, and was founded after consultation with Miss Florence Nightingale.

On joining the Queen's Nurses a trained nurse has to take a further six months' course of district training, with lectures. This is most necessary and beneficial to the nurse herself. One can imagine a hospital trained nurse, used to every convenience in the ward, finding difficulties in getting ready for an abdominal operation in a cottage in the country. The extra training teaches her, among other things, to utilise all sorts of domestic furniture and utensils for aseptic surgical purposes.

For those who are ambitious there is a future in this work. One may in time become a district or county superintendent, these posts giving scope for intelligence and powers of organisation and an interesting outdoor life.

Miss Wilmshurst gave a cordial invitation to all Guy's nurses to visit the training centre in Bloomsbury and learn more of the work.

The Universal Food and Cookery Exhibition was held at Holland Park on November 15th–24th, and a team of 6 Nurses again competed for the Hospital Challenge Shield for Invalid Cookery.

The Guy's Hospital Team consisted of Staff Nurse Wells, Staff Nurse Jillings, Nurse Chauntler,

Nurse Fraser, Nurse Hesslegrave, Nurse M. E. Lloyd, who have been awarded a Cup, the 2nd prize. The London Hospital Team won the Shield by a few marks.

The Duchess of York opened the Exhibition and was very interested in the Hospital Section, complimenting the Guy's Team on the appearance of their trays.

Sister Bodkin, Sister of the Preliminary Training School, was presented to the Duchess of York.

The following Nurses gained individual awards:

Silver Medal—Staff Nurse Jillings, Nurse Hesslegrave.

Bronze Medal—Nurse Chauntler.

Certificates of Merit—Staff Nurse Wells, Nurse Fraser, Nurse M. E. Lloyd.

The Gene.

(With apologies to Mr. Hillaire Belloc)

" THE gene is very much too small
" For you to make him out at all.
" Yet scientific people hope
" To see him with a microscope."

When he ordains, you have no brains.
If he's decreed, you are knock-kneed.
And, when he pleases, frightful sneezes
And coughs without number
Make hay of your slumber;
You've moles a score, and naevi more,
And warts galore. And if of yore
Your forbears were tripping, the horrible gripping
Of lumbago and gout
Soon lays you out.
He rules the cell. We know it well.
He holds the tricks. Our hardest kicks
And squirms with no relief are fraught—
For so by Science we are taught.
He's got a most determined will.
His size, however's, less than nil,
Because he's very much at home,
Reposing on a chromosome.

Moral: " Oh, let us never, never doubt
" What nobody is sure about."

παθογνωμονικός

Correspondence.

A Clubs' Union Chess Club,

DEAR SIR,—A communication sent by the Secretary of the Imperial College Institute addressed to the Secretary of Guy's Hospital Chess Club inviting such Club to a friendly match recently came into my hands in the absence of a Chess Club existing.

It seems to me that it is a pity that although most sports and games are represented in the Clubs' Union, Guy's are not represented by a Chess Club.

I am not quite sure, but I understand that there is an Inter-Hospital Chess Challenge Cup, at present held by London Hospital, and in that friendly spirit of rivalry which exists between the various Hospitals, I feel strongly that Guy's should not be behind in being represented in such a competition.

In conclusion, I may add that I have placed a notice on the Clubs' Union Council's Notice Board to which anyone who is interested is asked to add his name.

I am, sir,
Yours faithfully,
C. L. STEENVS.

Guy's Hospital, S.E.1.
November 14th, 1927.

Museum Specimens.

DEAR SIR,—I have paid my fees yet am I prevented from seeing museum specimens at 9 a.m. and at 5 p.m. by a shrieking mob of females.

Would that I had shortened my trousers, lengthened my shirt and gone to the Royal Free.

Yours, in sorrow,
B. A. M.

Guy's Hospital,
London, S.E.1.
November 28th, 1927.

[We can recommend a good dressmaker.—ED.]

Fund for the late H. W. Evans, M.C., M.D.

DEAR SIR,—The announcement of the death of Henry Evans must have caused grief to a large number of your readers. Personally, I can recall no man among my contemporaries who inspired such high regard from juniors, colleagues and seniors alike. It was impossible to share a job with him without recognising the integrity and the simple straightforwardness of his character. These qualities, linked with unusual ability, industry and a vast capacity for practical sympathy made up a remarkable personality.

He had the unique distinction of being elected President of the Residents twice—once just before he left the Hospital in 1914 on war service, and again when he returned in 1920 to hold the appointment of Obstetric Resident to Mr. Bellingham Smith.

During the past seven years few of us have seen much of Henry Evans. He became engaged in a busy country practice in Norfolk, and the urgent necessity of building up financial security for his young family precluded any of those happy reunions with contemporaries which no Guy's man would have enjoyed more than Evans.

It is a tragic commentary on the economics of the practice of our profession that Evans had derived no substantial financial reward for six years of hard work, although he had won a name for himself as a practitioner of unusual merit. Judged as a commercial asset the goodwill of his reputation is extinguished by his untimely death, but who can doubt that it remains to add lustre to the calling of medicine at large and to the alumni of Guy's Hospital in particular.

We have the opportunity of joining his patients and friends in making contributions to their Memorial Fund, which has the very practical object of helping Mrs. H. W. Evans. As stated in your issue of November 19th, subscriptious may be sent to H. J. Starling, M.D., 45, All Saints' Green, Norwich.

I am, sir,

Yours faithfully, A. J. M.

Reviews.

Physics. Part 2. Catechism Series. 3rd Edition. 68 pages, 3 diagrams. Published by Messrs. E. & S. Livingstone, 16 and 17, Teviot Place, Edinburgh. *Price* 1*s.* 6*d.*

BOOKS written in the form of a questionnaire, as the books of this series, have a strictly limited sphere of usefulness. The brevity with which the various subjects are treated—a brevity so essential to a book of this type—is, in itself, apt to be a little confusing. A student who has already acquired a fair knowledge of physics may find the book of use in revision, but it is doubtful whether the book is likely to be of any very great use to the neophyte.

The book deals with heat, light, magnetism and electricity. It is to be regretted that all reference to the subject of polarised light has been omitted from the book, but, on the other hand, reference to the second law of thermodynamics and the derivation of the Kelvin scale of temperatures might reasonably—from the medical student's point of view—have been passed over.

The book is of a handy size, and, used in conjunction with a good text book on elementary physics, will be found useful, but the student who attempts to describe a dynamo or electric motor in about 35 words—as this book does—would find that brevity had been pushed too far.

Aids to Biochemistry. By Cooper and Nicholas. Published by Messrs. Baillière, Tindall & Cox. *Price* 4*s.* 6*d.*

ONE of the minor evils of the examination system of medical education is the monstrous regiment of text books and cram books which are written to help the student to surmount these unnatural obstacles. As storehouses of facts these books are inferior to good technical dictionaries or encyclopædias. As introductions to interesting and important branches of knowledge, and as stimulants to research they are depressing and forbidding in the extreme. As specimens of English prose writing they beggar all description. As artificial aids to the negotiations of artificial examinations they fulfil their purpose. The book under review is written "primarily for purposes of revision." It is from this point of view only that it will be reviewed.

It contains a fund of concise, up-to-date information on the chemical properties and the tests for identification of some 130 substances of biochemical interest. Directions for isolation and estimation are also given in many cases. It is not quite so satisfactory in describing the part played by these substances in the domestic economy of the body. Even the short chapter on "Biochemical Processes in Living Organisms" devotes one of its three pages to vague generalities and another to mentioning some recent speculations. We feel that possibly some of the 20 pages on the chemistry of hæmoglobin, chlorophyll and the alkaloids, interesting though they are, might have been given with greater profit to a brief and clear account of some facts about "Dynamic Biochemistry." The chapter on vitamins, again, is devoted more to a discussion of recent failures to establish their chemical nature than to a clear account of their biological and medical importance.

These slight errors of emphasis are due, we imagine, to the fact that the authors are pure chemists, and are unaware perhaps of the peculiar requirements of medical examinations. Apart from this defect the book should certainly fulfil its purpose in "aiding" the student to revise both his theoretical and laboratory work before an examination in biochemistry.

Outlines of Dental Surgery: Operative Dentistry. Volume IX. By J. D. H. Jamieson, L.D.S.Edin. Published by Messrs. E. & S. Livingstone, Ltd. *Price 7s. 6d.*

NOT only practitioners or candidates for dental qualification in their fourth year, for whom in the main the book apparently was written, but, in our view, more especially those comparatively recent proselytes to the profession of dental surgery who are embarking upon clinical work will appreciate this means of introduction to the majority of its diverse aspects.

Operative procedures are essentially individualistic, and no amount of reading can replace nor discussion supply the dexterity which will at once enhance and accelerate the performance of routine operations in the mouth, but the consultation of a work in which brevity and solid information are harmonised should help to mitigate the apprehensions and dispel the vague doubts of the newly initiated.

In the extremely small compass of some 210 pages an attempt has been made to cover a relatively immense field, a large proportion of which is somewhat controversial. But the mere Sassenach should find considerable pleasure in reviewing the ideas of his Northern colleagues, notably in relation to methods of extraction. One cannot but admit a certain regret that space limitations apparently necessitated a somewhat cursory treatment of several subjects, although this feature might possibly lead the non-dental reader to underestimate the difficulty or multiplicity of the work involved, yet it may none the less prove welcome to the student already harassed with an excess of enforced excursions into purely academic spheres.

The Diagnosis of Pancreatic Disease. By Robert Coope, M.D. Published by The Oxford Medical Publications (Humphrey Milford). *Price 5s.*

THE usual medical monograph is quite often a mere laborious digest of the literature. Occasionally it is something more. When the author not only blends an unwieldy mass of scattered reference into a compact whole, but stamps upon the final product something of his own, the whole thing is rendered eminently more valuable to the tired reader. Dr. Coope is to be congratulated on his Rogers Prize Essay here published in book form.

Apparently the anatomy of the pancreas rather bunkers the clinician, who relies in diagnosis on the evidence of his own unaided senses, and the advantage lies with the laboratory worker who will not disdain to seek a specialised chemical or physical aid. We were glad to find in the physiological section that adequate mention had been made of the revolutionary work of J. Mellanby on the *secretin* mechanism, a brilliant piece of research which clears up many a clinical puzzle.

Dr. Coope opens with a quotation from Horace and concludes with Hippocratic epigram. The quality of his book renders neither his entrance nor his exit a sacrilege.

Operative Surgery Described for Nurses. By O. Stanley Hillman, M.B., M.S.(Lond.), F.R.C.S. Eng., M.R.C.P.(Lond.). Published by Messrs. Faber & Gwyer, Ltd. *Price 5s.*

THE idea of this little book is quite good. It is to present briefly and in simple language descriptions of the commoner surgical operations.

Anyone who has studied medicine will easily understand the accounts given, but one doubts very much whether any nurse possesses the requisite knowledge of anatomy or has seen a sufficient number of the operations described to make the book of much use to her.

A very great drawback to the book is the lack of suitable illustrations in sufficient numbers, without which a book such as this must be considered comparatively useless.

Physical Signs in Clinical Surgery. By Hamilton Bailey, F.R.C.S. 1st Edition. Published by Messrs. John Wright & Sons, Ltd. (Bristol). *Price 21s.*

THIS book, which is the outcome of demonstrations on the elicitation of physical signs given by the author, is intended as a help to the surgeon in enabling him to be more competent in diagnosing those doubtful cases which are constantly present in a busy surgical practice. In his introductory chapter Mr. Hamilton Bailey, quoting from Lockwood's *Clinical Surgery*, writes: "If it is a question of doubt in diagnosis you may often observe that one man solves the doubt when the others could not, and the way in which one man happened to solve it is this: he applied to the diagnosis of the case some method of examination which the others had not applied." In order that the surgeon may be familiar with the best of these methods this very excellent book has been written.

In a book dealing with demonstrations of physical signs a great deal of its value depends upon the quality of the illustrations. In this work the illustrations are generally good, all are original, and it is evident that they have been selected only after a careful and unbiassed scrutiny. It contains 261 of these, and they alone make this book worth a place on any surgeon's bookshelf. The text which accompanies and adds further explanation

to the illustrations is clearly written, brief and to the point, sections dealing with the examination of the breast and the hip joint being especially good, although it is hard to pick out for special mention portions of a book which is uniformly excellent.

The book is divided into some 15 chapters, which deal with the body in a regional manner. After a discussion on the elicitation of some of the basic physical signs—*e.g.*, fluctuation, translucency and the differential diagnosis of a pulsating swelling—the author deals with the physical signs of pathological processes in the head and neck, the breast and thorax, the upper and lower limbs and diseases of bone.

One chapter is devoted to the physical signs of hernia and its differential diagnosis, while abdominal disease is divided up into non-acute and acute abdominal conditions. Describing the methods of rectal and vaginal examination the author points out the importance of never omitting inspection before the examination and also of having a clear mental picture of what one is endeavouring to palpate during the examination. The work is concluded with an excellent chapter on the spine and peripheral nerves.

This book will well repay a careful study and is warmly recommended.

A Synopsis of Surgery. By E. W. Hey Groves, M.S., F.R.C.S. 8th Edition. Published by Messrs. John Wright & Sons (Bristol). *Price* 18*s.* 6*d.*

THE eighth edition of this book retains the same form as that of the earlier editions, and also maintains the high standard set by them. The text has undergone a thorough revision, mistakes have been corrected and certain new sections have been added. Thus, for the first time, appears a section dealing with anterior poliomyelitis, the after-treatment of which disease is so essentially an orthopædic problem. The chapter on hydrocephalus has been simplified and short notes on methods of diagnosis have been added. The chapter dealing with enlargements of the thyroid gland has been entirely rewritten, while that on tumours of the jaw has been enlarged.

The classification of spinal and intracranial tumours has been altered and now fits in better with modern theory and work. As an epitome of the salient facts in surgical practice, it will have a special appeal to the candidate, who has not the time for more than a hasty revision of the subject, before sitting for his final examination.

Sport.

Rugby.

Guy's *v.* Blackheath.

THIS match was played at the Rectory Field, Blackheath, on Saturday, November 19th. In spite of the bad weather some four or five thousand spectators were attracted to the Rectory Field. No doubt a large number turned up to watch the possibility of a duel between A. T. Young, England's scrum half, and T. O. Garland, but, much to their disappointment, Young was unable to get leave from his Army duties. In addition, Blackheath had one or two of their better-known forwards away, but in spite of this they fielded a powerful side. On the other hand, Guy's took the field without their captain, J. R. F. Popplewell, who had not recovered from the injury sustained against Coventry. Hogbin took his place and played splendidly—his following up being particularly conspicuous.

As anticipated, it was a very keen and exciting struggle from start to finish. Guy's, profiting by their chances in the first half, thoroughly deserved their success. Garland again played a prominent part in each of our tries, and was complete master of Thorn, who appeared at scrum half for the Heathens.

Mr. T. H. Vile handled the game admirably, although he was a little severe with Myburgh for hooking the ball in the scrum before it touched the ground.

Guy's kicked off, and Bishop at once set the Blackheath three's in motion. A fine passing movement along the whole line was spoilt when Morris gave Taylor a forward pass five yards from our line. From the scrum that followed Thorn was nearly over, but P. D. B. Spence saved in fine style and found touch well down. Devitt secured from the line out and, running strongly, punted when faced by P. D. B. Spence. The latter secured and, after handing off two opponents, made a lot of ground before being brought down.

The Guy's forwards then asserted themselves, and with Scholefield conspicuous with a fine dribble, play was carried to the home side's 25. Lewis only just failing to touch down.

After Spence had found touch Garland broke away and the ball was sent, via Preen and Spence,

to Lewis, who scored in the corner. The kick at goal was unsuccessful.

Soon after the kick-off Garland secured, passed to Preen, and enabled F. H. B. Spence to find touch with a good kick.

A rush by the Blackheath forwards looked dangerous when Preen picked up and cleared in fine style. Twenty minutes after the game had started Garland gave to Preen, who sent in Robinson for our second try, which again was not converted.

Guy's were penalised, but our forwards quickly transferred play to the Heathen's territory. Devitt again obtained the ball and, after a delightful run, found touch in our 25. Another movement by their three's broke down when Morris passed to Taylor. Garland, and then Lewis, made good attempts to break through, but the defence was too good. Durr received a nasty kick, but quickly recovered. Immediately after, Hogbin obtained possession and after a fine run gave to Lewis only to see his pass intercepted by Morris. Luckily the latter dropped the ball and Lewis, dribbling on again, scored in the corner.

Early in the second half Garland set Ryan in motion, who found touch. Good passing between Bishop and Kemp transferred play, but Preen prevented Devitt making further progress. In another good solo effort Devitt put in a fine zig-zag run and was only brought down near our goal line.

Guy's were penalised and Kemp attempted to place a goal, but the angle was too much.

Our halves were then prominent with another splendid effort, but Clayton-Greene saved and drove us back. Another good round of passing between Blakiston, Kemp and Devitt saw the latter cross our line for Blackheath's only score.

At this stage our opponents were exploiting the short punt and follow up methods, but the Guy's men were marking closely and tackling surely, so that progress was well nigh impossible.

Twice Taylor, the Blackheath wing, came within an ace of scoring, and was only brought down on each occasion near our corner flag.

Our men then set up a splendid attack on Blackheath's goal line, and for nearly 10 minutes kept the home side fiercely defending their goal line. F. H. B. Spence, Garland and Ryan all made excellent efforts to break through. Ryan, in particular, shook off two or three opponents before being finally tackled in front of the posts.

In the closing minutes Blackheath pressed heavily and should have scored had not Devitt missed a pass from Kemp. Our defence continued to hold out, and we eventually ran out worthy winners.

Result—Guy's 3 tries (9 points), Blackheath 1 try (3 points).

Guy's Team—P. D. B. Spence; A. J. D. Lewis, F. H. B. Spence, D. F. Ryan, T. G. Robinson; T. O. Garland, V. R. Preen; W. H. Myburgh, B. G. Scholefield, J. Durr, G. G. Cameron, J. H. Cullinan, C. D. Malone, A. Simpson-Smith, R. A. P. Hogbin.

Guy's *v.* Northampton.

THIS match was played at Northampton on Saturday, November 26th. We were compelled to make several last-minute changes. P. D. B. Spence, Durr, Scholefield and Popplewell were unable to make the journey, and their places were taken by J. G. Johnson, A. R. Clarke, G. F. Lashmore and R. A. P. Hogbin.

It was an exciting game, although somewhat disappointing, as at least two of the tries scored by Northampton were obtained through mistakes in our defence.

Guy's started before a good crowd and the forwards were soon prominent with two or three rushes. These were checked in turn by Jones, Milward and Haslemere.

Our three's eventually broke away, but Haslemere tackled soundly and broke up a promising movement.

Play was carried to our 25, but Johnson relieved with a good kick. The home team forwards came again and Harris, picking up a yard or two from our line, scored a good try in the left hand corner. Vaughan failed with the kick.

Northampton continued to press, Coley and Birch being particularly prominent, and play continued in our half until we were awarded a penalty. Poor use was made of the kick and only a few yards were gained.

Guy's were penalised for offside, and from 40 yards' range Vaughan made a good effort to score and only just missed.

Jones, the home side's fly half, then cut through in fine style, only to see his pass intercepted by our three's.

A period of midfield play followed until a mistake by our defence let in Jelley, who had no difficulty in scoring behind the posts, which Harris easily converted.

Guy's had a look in for a short time and Robinson reached Northampton's 25 line before being brought down by Birch.

Irregularities in the scrum brought us another penalty, but again the kick was not well utilised. Play was transferred to our goal line, where Johnson made a remarkable save, picking up and running to half way.

Prior to the interval Guy's went into the home side's 25, but Vaughan saved, and a good passing movement between Robinson, Ryan and Garland ended when the latter was heavily tackled by Luck. A penalty was awarded to Guy's, but the kick fell short.

The second half saw Guy's in much better fettle and from the kick off we pressed for some time on Northampton's goal line, but their defence was excellent. One fine round of passing along the whole of our three-quarter line saw the ball eventually go to Robinson. After a good run he was brought down in the nick of time by Jones.

Coley fielded a high punt and sent the ball to midfield. For some minutes a stern fight was waged without either side claiming any advantage until Robinson was set going and, after a 30 yards' run, was again stopped by Jones.

Our forwards then took up the attack and Garland broke away. He passed to Robinson, but the latter was pulled up. Another passing movement in which Ryan and Spence showed up well transferred play into the home 25. A golden opportunity was lost when, in an attempt to get the ball to Lewis Ryan threw forward.

Haslemere kicked well into our half and Mayer and Jones following up found touch in our 25.

A battle between the forwards followed, and eventually Jones kicked across to Haslemere, who took the ball on the bounce and dashed in for another try, which was not converted.

The Hospital forwards went off with a great rush, and in an attempt to drop a goal the ball went dead. Continuing the pressure Guy's were eventually rewarded when Cullinan dashed over for a try, which Johnson converted.

Result—Northampton 1 goal 2 tries (11 points), Guy's 1 goal (5 points).

Guy's Team—J. G. Johnson; A. J. D. Lewis, F. H. B. Spence, W. Ryan, J. G. Robinson; V. R Preen, T. O. Garland; W. H. Myburgh, A. R. Clarke, C. D. Malone, A. Simpson-Smith, J. H Cullinan, R. Hogbin, G. F. Lashmore, G. G Cameron.

Guy's "A" *v.* Harlequins "A."

PLAYED at Teddington on November 5th. The Hospital were outclassed behind the scrum by a three-quarter line that would have disgraced no first class side. All the tries against the Hospital were scored as the result of interceptions or breakaways by the Harlequins three-quarters. Each time the full back seemed to have three men to tackle, and as their handling and passing under ideal conditions were perfect, all the tries were scored between the posts and converted. The defence of the Guy's halves and insides was not good enough to hold their opponents. The forwards were too slow in getting across and did not tackle hard or low enough when they did get there. In the tight scrums the Hospital were a little slow on many occasions and certainly did not use their weight to the best advantage. Guy's three-quarters saw plenty of the ball, however, but missed many chances. The forwards were responsible for 3 of the 4 tries scored. The first was scored by Morgan from a lineout about 15 yards out. The score was then 15–5. A little later two of the forwards dribbled from the Guy's 25 nearly to the opposite 25 and then heeled for Ive to score on the opposite wing. In the second half Hogbin broke away from the lineout for Clarke and Morgan to complete the movement. G. J. Clarke scored the remaining try by cutting through himself. The game was hard and very fast, but it should teach both forwards and three-quarters the need for more hard and low tackling.

Result—Harlequins 7 goals (35 points), Guy's 1 goal 3 tries (14 points).

Guy's Team—F. F. Kennedy; O. Ive, E. J. Littledale, W. B. Clegg, G. R. Mostert; G. J. Clarke, R. J. Eustace, J. C. T. Tregarthen, G. Lashmore, A. R. Clarke, D. S. Clogg, T. Morgan, J. H. Richmond, L. Brown, R. A. P. Hogbin.

Guy's "A" *v.* Old Blues "A."

PLAYED at Fairlop on November 12th. The Hospital were unfortunate to be 6 points down at half time, after having had the best of the game. The two free kicks were awarded for foot-up and offside in the first quarter of an hour. Apart from this, Guy's were much the better side except that they had no one to take the place of Tregarthen in the centre of the scrum. In the tight scrums the Hospital consistently failed to get the ball, and therefore the three-quarters saw little of the ball. After the interval the Hospital rallied and Mostert scored after running well. The Old Blues replied with a try scored by one of the centres. Finally, just on time, in a heavy mist, G. J. Clarke cut through and passed to Jones, who ran well to touch down in the corner. The failure of our pack in the tight scrums did not give the Hospital backs a chance to wipe out the earlier mischances.

Result—Old Blues 2 penalty goals 1 try (9 points), Guy's 2 tries (6 points).

Guy's Team—A. G. Johnson; G. R. Mostert, E. M. Harding, E. J. Littledale, G. J. Clarke; W. B. Clegg, R. J. Eustace; J. H. Richmond, R. N. C. Smith, A. R. Clarke, L. Hilton, M. A. Freeman, D. S. Clogg, J. W. H. Jones, G. Lashmore.

Hockey.

Guy's *v.* East Grinstead.

THIS match was played at Elmers End on Saturday, November 19th, and as it is one of our better fixtures we were able to field a good side, the team being Wootton ; F. R. Hayward, E. T. Conybeare ; C. N. Howitt, C. A. W. Archer, R. A. Sykes ; H. N. Garras, A. H. Curtis, F. E. Camps (capt.), S. R. Peatfield, H. O. Lyne.

From the bully-off East Grinstead quickly set their left wing in motion, but Howitt relieved with his customary stolidness. After this play continued even for some time, although East Grinstead were held together rather better than ourselves by their centre half, B. A. Castle, a " Trials " man, who played an extraordinarily good and clean game throughout.

Several times East Grinstead should have pierced our defence, but their centre forward deluded himself that he could manage without assistance.

After 20 minutes' play their inside left scored from a good centre by the right wing. Soon afterwards, following some ragged play in our half, they increased their lead. This goal seemed to rouse our team to the fact that something must be done, and from a good hard centre by Lyne, Curtis scored with a fast shot.

Play seemed to have been in progress for a very long time when one umpire stopped the game to inquire about half-time, but the other umpire, who was timing, insisted that there were a few more minutes left, and, as invariably happens in such cases, a goal was scored by East Grinstead following a breakaway on the left.

Soon after half-time they increased their lead to 4–1, but we soon scored as the result of some close passing, Peatfield doing the final part. Immediately from the bully-off East Grinstead scored an almost mathematical goal, the sort that makes the game look so easy to play. The ball went to the left wing, who gave it to his inside man at precisely the right moment, and he passed to the centre forward, who returned it to the inside left, who finished off an excellent movement with a stinging shot.

From this point we improved steadily, our forward movements being very dangerous, as both outsides were centring hard, although the right wing might centre earlier with more benefit.

Ultimately, fron a passing bout between Camps and Curtis, the former scored. Our last goal was the result of a penalty bully, Camps having run through the defence, flicked at goal, and the goalkeeper, not content with stopping it, fell on the ball and would not get off. From the resulting penalty bully Curtis scored.

Thus, we lost a most enjoyable game by 5–4 against a side containing several County players. The whole Hospital XI played well, and it is certain that if men would show more enthusiasm and turn out regularly our results would be greatly improved.

Guy's *v.* Depôt of East Surrey Regiment.

WE met the Depot of the East Surrey Regt. at Kingston on Wednesday, November 23rd. Throughout the game we were superior and won comfortably by 6–3.

This match was really no hard test for the Hospital, as our opponents, besides being less skilful, were not nearly so fast.

For the Depot Lieut. Porch, at centre half, played well, hitting the ball well up the field. These tactics paid to the extent of three goals, but usually our defence was not found wanting and cleared easily, although on one or two occasions the wing halves were seen to clear across their own goal—an unpardonable error.

Goals for us were scored by Curtis (2) , Archer (2), Edmonds (1) and Peatfield (1). Our shooting was greatly improved, all our goals except one being the result of good hard shots. This is a pleasing improvement.

Guy's Team—Wootton ; F. R. Hayward, E. T. Conybeare; S. W. Wright, R. A. Sykes, W. S. Larcombe; J. T. Edmonds, A. H. Curtis, C. A. W. Archer (capt.), S. R. Peatfield, H. O. Lyne.

Tennis Club.

AT the Annual General Meeting of the above Club, held on Tuesday, November 1st, the following officers were elected for season 1928:—

President—
W. M. Mollison, Esq., M.Ch., F.R.C.S.

Vice-Presidents—
H. Chapple, Esq., M.Ch., F.R.C.S.
H. W. Barber, Esq., M.B., F.R.C.P.
C. Lambrinudi, Esq., F.R.C.S.

Captain—
H. C. Van den Broucque.

Hon. Secretary and Treasurer—
H. M. Crombie.

Committee—

1st Year	F. G. Holman.
2nd Year	R. B. Pearson.
3rd Year	F. G. Booker.
	D. K. Gaitskell.
4th Year	O. Plowright.
	G. M. Housden.
Dental	C. E. W. Kurtz.
	S. P. Ellis.

H. M. CROMBIE, *Hon. Sec.*

Hospital Information, etc.

Pass List.

University of Cambridge.

Bachelor of Medicine.

October, 1927

A. C. Copley
W. H. Craib

L.D.S.

FINAL EXAMINATION

November, 1927

PART I

M. G. Berry
A. H. Curtis
L. E. James
V. R. Preen
P. S. Turner
J. E. Willett
H. J. Cracknell
T. L. Hossell
C. M. Leckie
C. W. Pound
W. J. Scoble
C. L. Stevens
H. C. J. Van den Broucque
V. G. Boyle
W. Holgate
G. K. Lacey
C. A. E. Tomes
G. N. S. Weller
F. Allott
L. W. G. Fisher
J. W. H. Jones
K. S. Morris
L. R. Rowlands
A. W. G. Small
F. C. Tomlyn
H. Winter

PART II

M. G. Berry
W. Holgate
C. A. E. Tomes
G. N. S. Weller
T. J. Barnes
T. M. Calhaem
H. E. S. Collingwood
A. H. Herbert
C. N. Talmadge
V. G. Boyle
G. K. Lacey
P. S. Turner
J. E. Willett
D. C. Buckley
R. Catchpole
L. M. Garrett
N. L. Salton
G. G. Thwaits

Conjoint Board.

October, 1927

PRE-MEDICAL EXAMINATION.

Chemistry, Physics and Elementary Biology

N. G. Benjafield
A. D. Taylor
J. T. Holford
T. Morgan
E. H. Lewis
C. V. Kark
E. Widdowson

FIRST EXAMINATION

J. W. Oliver
R. O. Payne
V. Constad
A. C. Hauptfleisch
N. V. D. Bolt
J. S. Lane
P. Brown

SECOND EXAMINATION

G. G. Ellis
W. J. D'Rosario
E. C. Shaw
J. B. Scholefield
A. D. H. Hugo
R. S. Thomas
R. W. Stephenson
N. I. Kronenburg
W. K. Schnarr
N. J. Boulton
T. D. T. Brocklehurst
E. M. MacLachlan

FINAL EXAMINATION.

October, 1927

Medicine

*G. M. Housden
*L. E. Lane
*T. M. Robb
*E. L. Graaf
R. L. Howard
*C. R. E. Freezer
*W. J. E. Radford
*L. P. Tupling
*E. H. Hudson
*R. G. de Kock
*W. H. Miller
*E. C. H. Huddy
*C. H. Egan
*C. Arkles
*W. J. Heely
H. Epstein
*L. Brown
*H. Kaitz
*E. Clayton-Jones
*D. Ellis
*S. T. Williamson
J. H. Cullinan
*T. O. Garland

Surgery

*C. Arkles
*L. Brown
*C. R. E. Freezer
*T. O. Garland
*O. A. Beadle
*R. E. Havard
*W. S. McConnell
J. P. M. Franes
*H. G. Floyd
*H. I. Maister
G. N. Wood
P. D. B. Spence
W. P. R. Swemmer
*H. Kaitz
*G. C. Campbell
J. D. Cambrook
*W. F. Hudson
G. V. R. Mostert
*D. F. Kanaar
*P. M. Deville
*T. G. Scott
J. C. T. Tregarthen

Midwifery

*W. J. Healy
N. S. Narasimham
J. M. Hulett
E. C. Woodhead
G. G. Cameron
G. C. Campbell
*J. D. Cambrook
E. T. Conybeare
H. N. W. Harley
R. E. Rix
G. N. Lewin
R. L. Harward
*P. H. Loretz
R. A. Leader
E. H. Sears
S. G. Knowles
*O. A. Beadle
*W. F. L. Hannay
*R. E. Havard
J. E. Morton
F. S. Warner

* Have now completed the Examinatio:

Papers by Guy's Men.

R. P. Rowlands, F.R.C.S. The Operation for Loose Semilunar Cartilage, *Clin. Jour.*, lvi, 1927, p. 505.

R. Brooke, F.R.C.S. Periarterial Sympathectomy, with Ligature of the Femoral Vein in the Treatment of Diabetic Gangrene, *Practitioner*, cxix, 1927, p. 327.

R. G. Williams, M.R.C.S. The Functions of the Liver as Affected by Malaria Induced in General Paralytics, *Lancet*, 1927, ii, 1071.

F. N. Doubleday, L.R.C.P., M.R.C.S. On Chronic Fuso-Spirallary Infection of the Periodontal Membrane and Its Treatment, *Proc. Roy. Soc. Med.*, xxi, 1927, p. 139; *Sec. Odontology*, p. 5.

Births.

MEACOCK—On November 10th, 1927, to Ruth, the wife of Stanley P. Meacock, L.R.C.P., M.R.C.S., L.D.S., 56, Queen's Road, Coventry—a daughter.

Marriages.

DODD—GILLER—On October 29th, at Christchurch, Cheltenham by the Rev. Canon Webb-Peploe, Kathleen Norah, youngest daughter of Mr. & Mrs. G. S. Giller, Cheltenham, to Edward Frank Dodd, L.D.S., R.C.S.,Eng., son of the late S. Dodd of Wells, Somerset and Mrs. Dodd, London.

MARSH—DRABBLE—At the English Church, Basra, on November 12th, 1927, Frank Marsh, only son of Dr. and Mrs. A. H. Marsh, of Dunorlan, New Eltham, and Margery, elder daughter of Mr. and Mrs. Ernest Drabble, of Westlea, Matlock, Derbyshire.

Deaths.

MEACOCK—On November 17th, 1927, at the Regent Nursing Home, Coventry, Ruth, the beloved wife of Stanley P. Meacock, L.R.C.P., M.R.C.S., L.D.S.

MUGFORD—On November 7th, 1927, suddenly, Sidney Arthur Mugford, M.R.C.S., L.R.C.P., of North Side, Clapham Common, aged 65.

SMART—On November 16th, 1927, at Shepherd's House, Marden, Kent, Dr. Alfred Smart.

DAY—On October 27th, 1927, Thomas Montagu Day, M.R.C.S., L.R.C.P., at Harlow, Essex.

EDS. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *December 17th, 1927.* *Number 1028*

PASSIM

WHEN we were very young—if we may borrow such a well-known phrase—the present season was one of the red letter days in our lives. For months previously to December 25th we were wont to count the intervening days until the minutes lengthened into hours, the hours passed as days and the days were almost unbearable in their longevity. But now that we are growing old we find time passes rapidly—perhaps we are more occupied now than then—and it was with an almost perceptible start that we realised that this was our Christmas number. It therefore behoves us to offer to our readers the season's greetings and to hope that they will make good cheer and once again be very, very young. For Christmas time is essentially the children's time, and nowhere is this better shown than in our own Hospital. Those of us who have had the good fortune to be present at the Landon "Tea" on Boxing Day, the Lydia Christmas Tree or have watched spellbound the mystifications of Professor Bullivant at the Baby Ward Party are quite convinced that the Hospital throws off its necessary mantle of officialdom and becomes a veritable heaven for the patients who are fortunate enough to be in it at this time.

Realising that there must be many who would wish to share the pleasures of the Hospital at Christmas, we publish in this number a brief calendar of the chief events of our week of festivity. But it must not too lightly be said, "I shall go round with the Niggers." That is not enough to make your Christmas a success. Unless the true spirit of the season is acquired you will be like the town nearby Hanover City after its visitation by the Pied Piper. And this spirit is that of childhood and youth, without which the season is dead.

WE offer our heartiest congratulations to Mr. A. T. Fripp on his success at the recent Final Fellowship Examination. Of a class of 16 from this Hospital, no less than 9 were successful in satisfying the examiners. We feel that this maintains the high reputation of Guy's as a surgical school.

MR. L. R. B. BIRT has been elected President of the Residents and Mr. S. R. Trick Vice-President, on the retirement of Mr. L. S. Williams and Mr. R. C. Brock.

THE following Appointments have been made :—

Dental House-Surgeons—Messrs. T. M. Calhaem, G. G. Thwaits, T. J. Barnes, A. H. Herbert, D. C. Buckley, W. Holgate.

Assistant Dental House-Surgeons—Messrs. C. L. Stevens, M. A. Rushton, V. R. Preen, D. B. Bergh, J. W. H. Jones.

WE are asked to announce that there will be given, on the evenings of January 18th 19th, 20th and 21st, a performance of *The Mikado* (Gilbert and Sullivan), by the Guy's Hospital Musical Society, at the Guildhall School of Music Theatre, John Carpenter Street, Blackfriars, E.C. Tickets may be obtained from Mr. L. K. Wills, Mr. N. L. Barber The Wills Librarian, or any member of the Musical Society, and early application to the above at Guy's Hospital, S.E.1, is advisable, as the number of seats available is strictly limited.

WE would like to offer our deepest sympathies to Dr. S. P. Meacock on his recent bereavement.

Hospital Calendar, Xmas, 1927.

CHRISTMAS DAY, SUNDAY, DECEMBER 25

Hospital Chapel—

Holy Communion at 6.15, 7 and 8.30 a.m.

Morning Prayer at 11 a.m.

MONDAY, DECEMBER 26

Niggers in all Wards. Start 10.30 a.m. Probable order :

Landon Tea in Out-Patient Hall.

Dressers' Tea in Mary.

TUESDAY, DECEMBER 27

Concerts in Mary, Eyes, Evelyn.

Baby Ward Party.

Tea (and Informal Concert) in Addison.

Dance in Out-Patient Hall.

WEDNESDAY, DECEMBER 28

Concert in Dorcas

Tea (and Informal Concert) in Christopher.

THURSDAY, DECEMBER 29

Concerts in Bright, Cornelius and Lazarus (joint), Stephen, Dorcas.

Tea (and Informal Concert) in Clinical.

Tea and Annual Punch and Judy Show in Lydia and Astley Cooper.

FRIDAY, DECEMBER 30

Nurses' Dance in the Home.

Secondary Affections due to Diseased Teeth and Oral Sepsis.

A Clinical Lecture given by Mr. Dowsett.

GENTLEMEN,—Of the subjects which I, as a dental surgeon, can talk about to you, more especially interested in medicine and surgery, I thought that perhaps a useful subject would be "Secondary Affections Due to Diseased Teeth and Oral Sepsis," because there are so many of these affections that they take a certain amount of consideration. It is not so long ago that some members of the medical profession got into the habit of considering that everything might be due to the teeth, and many cases considered to have toxæmia were sent straight to the dental surgeon to have the teeth attended to in the belief that until the teeth were dealt with medical advice could not do much good. That phase is passing away now, and we are getting on to sounder ground in regard to the pathology of such cases. Nevertheless, one does come across very frequently serious affections of the general system which are brought about by the teeth.

We first want to consider what is meant by oral sepsis because there is considerable misconception with regard to this. Because the teeth are carious that, *per se*, does not constitute oral sepsis. Oral sepsis means that the septic condition is definitely in the mouth and giving rise to local inflammation and possibly to absorption of toxins. Dental caries is localised to the hard dental tissues and it only becomes a condition of any danger to the well-being of the patient when the pulp or the periodontal membrane becomes involved, or when the gums and adjacent tissues, including the bone, are affected from that or other causes.

There is another point to consider with regard to this oral sepsis with absorption giving rise to toxæmia, and it is this—that a certain amount of this infection is what is known as closed infection, whilst another type is known as open infection. They are two distinct kinds, and closed infection is likely to be the more serious. The tooth is embedded in the bone, and the periodontal membrane is between the tooth and the bone. When the pulp dies and becomes septic the septic matter passes through the apex and the periodontal membrane becomes affected and may suppurate, but even before pus is formed, and certainly afterwards, there is always absorption of the bone around the end of the tooth. If there is pus it may pierce through the bone and form a gumboil ; it sometimes remains in the bone and the inflammation does not progress any farther, but it remains a septic focus, and a septic focus is always a potential source of infection to the patient by the absorption, of course, going into the blood stream. On the other hand, if the pus has gone through into the gumboil and is being continually

discharged into the mouth, then it is being swallowed, and perhaps may be dealt with in other ways and become innocuous. But that is a possible source of danger as well. If the infection remains, and especially if the pulp remains septic, giving off small doses of poison into this rarefied area at the apex of the tooth, the blood stream takes up the infection, and this infected area may be a continual source of toxæmia. The open infection simply means inflammatory conditions of the gums or pus draining into the mouth. Tartar on the teeth, with its attendant gingivitis and perhaps "pyorrhœa," constitute a very frequent source of open oral sepsis.

The so-called pyorrhœa that you have all heard about is the commonest form of this open infection or open sepsis. There is a certain amount of discharge, the pus coming away from the necks of the teeth, and being continually discharged into the mouth and being swallowed. That is sometimes confined to the necks of the teeth, or it may progress downwards along the roots of the teeth and give rise to a worse condition there. When there is infection of that type in the mouth, and pus and toxins are being swallowed continually, they may be dealt with by the gastric juices and rendered innocuous. On the other hand, if the dose of pus is large and continually being swallowed, it may give rise to further troubles. These I shall point out to you in a moment. So much then for the distinction between closed infection and open infection.

I want now to describe to you the various ways in which both these conditions may give rise to so-called secondary affections. For the purpose of classifying them we can start with *direct* infection from the teeth or the gums; that is to say, the spread of inflammation or the direct spread of infection.

One common result of that will be stomatitis, that is, an inflammation of the mucous membrane of the mouth, quite apart from the margin of the gums. If there is a further extension of the inflammation there may be a glossitis. This also may be started by direct infection from the teeth, especially when coated with tartar. That is extremely common and sometimes very distressing, and cannot possibly be cleared up until the original source of the infection has been treated. By an extension of the inflammation still farther back, or by a spread of the micro-organisms, then it is quite likely that a tonsilitis may arise from bad teeth. Unless that is recognised it is no use treating the tonsils and leaving the septic mouth. The tonsilitis will recur as soon as treated so long as the septic condition of the teeth remains as the original cause.

If the inflammation extends still further backwards there may be a chronic pharyngitis. Sometimes, especially with an acute abscess, as the pus comes through the bone it gives rise to inflammation of the soft tissues outside the periosteum, and a cellulitis of the face arises. Also, in the lower jaw more especially, the pus may track backwards and there may be a cellulitis of the neck, and if one is not on the lookout for the bad tooth it may be overlooked. If the suppuration is around the lower third molar it may track backwards and get into the pharynx. Post-pharyngeal abscess has on many occasions occurred from abscess of the lower third molar. That may, of course, become a very serious affection, and must be recognised.

From extension of the inflammation in the upper jaw the antrum may be infected. As you probably know, certain teeth have their apices pointing into the antrum. Sometimes there is no layer of bone between the teeth and the cavity, though that is uncommon, and if the apex of a tooth becomes inflamed, the antral-lining membrane also becomes inflamed and may suppurate. If suppuration occurs it constitutes an empyema of the antrum, and that is, of course, a very serious matter. Also in the upper jaw the tracking of this pus upwards, especially with the incisors, may give rise to cellulitis of the orbit. That fortunately, is uncommon.

Another condition in regard to direct infection is infection in the bone itself. The bone may become necrosed from the abscess formation, most commonly of the alveolar process, but sometimes there may be necrosis of the body of the jaw, more especially of the mandible.

Sometimes one gets affections of the skin from direct infection. Quite a common one is impetigo, brought about by direct infection from the mouth. Micro-organisms may get from the mouth on to the skin by a child sucking its fingers and then rubbing its cheek with them. Another direct infection is that known as streptococcal lymphangitis, a very nasty affection, giving a puffy condition of the whole face, and most commonly due to a septic mouth, nearly always streptococcal. It is an œdematous condition of the face and cheeks, and frequently recurs.

There is another way in which neighbouring tissues may become affected, and that is by what we may call *remote* septic infection.

The lymphatic glands are most commonly affected, and there may be inflamed lymphatic glands anywhere, according to the situation where the sepsis is arising, more commonly, of course, inflamed sub-maxillary lymphatic glands. The inflamed lymphatic glands may suppurate and form a lymphatic abscess. Tubercular glands in the neck in children are started very frequently by diseased teeth. That is, of course, of the utmost importance to remember. When the glands are

already inflamed as a result of septic teeth, then in any child of a strumous type the glands may become easily infected with tubercle. Without the infection through the teeth the glands would probably never get enlarged at all, and then these glands would not become tuberculous.

As I said at the beginning with regard to this sepsis from continual swallowing of the septic matter from the mouth—it is not always necessarily pus—the patient gets an overdose of micro-organisms into the stomach. For that reason, if the gastric juice does not overcome them, or if the patient's resistance is low and the virulence of the micro-organisms happens to be high, sooner or later the patient will get septic gastritis. The infection may go further, of course, and give rise to enteritis. It has even been said that a certain number of cases of appendicitis may actually be due to the teeth. Gastro-duodenal ulcer may be actually started in this way. Of course, if one suspects such a thing as that, one should definitely see that the teeth and mouth are put in a perfectly healthy condition, otherwise the infection will recur if it is due to the teeth or gums.

With a very septic mouth patients have been known to get what is known as septic pneumonia. That may occur after anæsthetics, especially after ether. If people do get septic pneumonia after an anæsthetic it is very likely due to the septic condition of the mouth with the continued inhaling of septic matter into the lungs, perhaps with a predisposition to infection as a result of ether continually being inhaled. It is therefore important that when people are about to be long under an anæsthetic the mouth should be in a healthy state. We are recognising that more and more as time goes on.

There is a more serious affection, but not so common, sometimes brought about with an abscess formation in the neighbourhood of the upper teeth. This infection may find its way through the facial vein straight into the cranial cavity. Meningitis and thrombosed sinuses have been known to occur from abscesses of certain upper teeth. That may be rare, but nevertheless should be borne in mind.

There is another class of infections, namely, those brought about by definite *absorption* into the blood stream, absorption of either toxins merely or of micro-organisms themselves. From that condition there may arise a very large number of sometimes serious affections. Ordinary toxæmia from the absorption of toxins into the blood stream is very common. If that goes on still further, so that the patient actually absorbs micro-organisms in addition, then he will get a condition of septicæmia, with symptoms which may be very serious. Later, if the absorption goes on still further, he may get a pure pyæmia, with metastatic abscesses throughout the general system. These are fortunately rare from the teeth, but have occurred nevertheless.

Another common infection due to toxæmia from the teeth, and mostly brought about from the closed infection rather than the open infection, will be the various forms of anæmia. Pernicious anæmia probably is the most important and the most common as well, and is quite well recognised as being definitely due to toxæmia, and the most common cause is probably from the teeth or gums.

A very serious affection from toxæmia is, of course, the condition of the heart known as septic endocarditis. That wants very careful dealing with when one comes to treat the teeth.

You may ask how can these conditions be recognised as being brought about by diseased teeth or gums ? It is always very difficult. Sometimes one can definitely establish the micro-organism which has given rise to a general affection in a patient with one or other diseased teeth, especially if there is apical trouble. For example, the organism which has caused arthritis may be the same as that found at the apex of a tooth of the patient. Sometimes one can rely on the removal of one or other of the teeth. Suppose, for example, suspecting the teeth as the cause of toxæmia, a tooth is removed—then if there is a general flare up in the condition that is an indication that the patient has a reaction, and the dealing with that particular tooth has let loose micro-organisms from the apex of the tooth into fresh tissues, and the patient has got a further infection. The reaction is an indication that one is adopting the right kind of treatment.

In addition to those things that I have mentioned with regard to general absorption into the blood stream other common conditions are neuritis, myositis and the various forms of arthritis. Again, it is very difficult to establish whether the teeth are the actual cause, but it frequently happens that when the teeth are treated the condition subsides.

Affections of the skin from absorption are probably more common than from direct infections. Such affections are acne and various forms of erythema are established to be due to toxic conditions in the blood, frequently brought about by septic conditions of the teeth and gums.

There is another condition which is not very frequently seen, and quite a good example of which happens to be in the Wards at the present time. I refer to purpura, which is thought to be due to toxæmia in the majority of cases, and in some instances can definitely be traced to the condition of the teeth. There is a particular case in the Wards where certain teeth have been removed and a cultivation made from the apices,

and a vaccine prepared, and the patient apparently is vastly improved.

Affections of the eye are not at all uncommon in association with bad teeth. If one suspects that the teeth may be the cause it is important not to remove too many teeth at a time, in case there is a flare up to such an extent that it will make the condition very bad indeed. That is to say, if the eye is fairly bad and rather acutely inflamed, and several teeth are extracted, thereby giving rise to a big flare up, there may be so much reaction as to cause permanent blindness. Several cases have been recorded of septic endocarditis which has been due to the teeth, and where a large number of teeth have been removed at once the patient has died, whereas if one tooth had been taken out at a time those lives might have been saved. That has simply been the result of a general flare up in a dangerous area.

Another type of affection due to the teeth is that which manifests itself as a result of nervous irritation, and may occur quite apart from anything in the nature of septic absorption, The commonest of these conditions is, of course, neuralgia—that is, pain in the course of or in the area of distribution of a particular nerve. One need not go into the various affections of the teeth that will bring that about, but the commonest cause of neuralgia is diseased teeth.

There are various other nervous affections due to bad conditions of the teeth of which not at all an uncommon one is hysteria. A patient may get an hysterical attack from toothache. Definte epileptic attacks have also been brought on merely from the aching of a tooth. Various spasms of muscles may also occur during toothache, spasms of the facial muscles, spasms of neck muscles giving rise almost to wryneck, and also spasms of the masticating muscles, which is known as trismus. But those spasms of muscles due to the teeth are very rare. When the patient's symptoms render him unable to open the mouth that is very frequently spoken of as trismus, but, as a matter of fact, it is not so as a rule. In the vast majority of such cases, when the patient cannot open the mouth, it is due to inflammatory products in the neighbourhood of the angle of the jaw preventing the mouth mechanically from being opened. In most of such cases it is not trismus, but true trismus can occur and therefore must be borne in mind.

Bad teeth have also been known from interference with the trophic nerves to give rise to affections of both the eye and the skin, especially of the scalp, turning the hair sometimes white on one side from continual toothache on that side. That is very rare, but nevertheless has occurred.

Irritation of the tongue is another condition which may be brought on by diseased teeth or by jagged teeth. That is of the utmost importance because a jagged tooth may be the starting point of an epithelioma of the tongue. Of course, there may be a predisposition in that direction due to a syphilitic condition of the patient. To produce an epithelioma of the tongue would in most cases probably require a dirty, septic condition of the mouth in addition to jagged teeth. If the mouth was perfectly clean the probability is that jagged teeth would not give rise to epithelioma. Of course, one often finds septic ulcers on the tongue which are not epitheliomatous. Epithelioma mostly occurs after middle age. Because one has a septic ulcer as well as jagged teeth it is not necessarily a case of epithelioma, but the dental condition ought to be treated at once in case such a condition should arise.

Patients may be suffering from a general malnutrition or inanition, of which it is sometimes difficult to establish the cause. That may simply be due to a lack of mastication from insufficient number of teeth, but more likely to lack of the use of the teeth because many of them are badly diseased. It may therefore be a question of non-assimilation of food, in addition to general septic infection and septic absorption.

Those are all the conditions one can think of at present which may arise from diseased teeth or diseased mucous membrane of the mouth. But I do want you to remember, as I told you at the beginning, that closed infection is infinitely more important than open infection,and cannot be treated other than by extraction of the diseased teeth. Open infection frequently can be treated without recourse to that, but if you can establish closed infection, which can usually be seen on the skiagram, then the condition must be dealt with by extraction.

There are many pathological points to consider with regard to closed infection which one can just briefly refer to. Sometimes those rarefied areas in the apex of the teeth may remain in the jaw for years and never give rise to any trouble at all, and it does not necessarily mean because such a condition is found by means of the skiagram that the patient is being infected thereby. It may be that the patient's resistance is good, or it may be that the micro-organisms are lying there dormant, or that there are no micro-organisms at all. The rarefied area, seen in the skiagram, may be completely filled up with organised fibrous tissue, with no infection. But it must always be looked upon as a potential source of trouble. It has also been considered that the granulomatous tissue that one finds at the apex of a tooth is a barrier to the invasion of micro-organisms. That, however, we are not sure about, for it has not been quite pathologically established.

The Junior Guyite Dinner, 1927.

THE 52nd anniversary of the Junior Guyite Club was celebrated on the evening of Thursday, December 1st, when some 24 members and guests gathered for dinner at the Royal Adelaide Gallery.

The chair was most ably filled—and in more senses than one—by Dr. A. Allport. The following members and guests were present :—

Sir Sidney Alexander, Dr. Alfred Allport, F. Beard, H. M. Brown and friend, Thos. Brown, H. M. Clarke, D. F. Durward and friend, Dr. Herbert French, W. E. Fox, J. W. F. Jewell, G. Kidman, R. Murdo Mackenzie, C. H. Medlock, W. G. Nash, R. R. W. Oram, C. E. Price, Dr. J. G. Porter Phillips, P. N. Randall, W. R. Reynell, Dr. J. H. Ryffel, A. H. Todd and Mr. Philip Turner.

The loyal toasts having been honoured, the assembly settled down to the comfortable stage of coffee and cigars, which was to accompany the first taste of the lively musical programme to follow. Mr. Joseph Batten at the piano, to the great delight of the audience, ran through a number of the popular melodies of older days. In many cases members were able to chime in fortissimo with the choruses or hum the refrains.

The business of electing a Vice-Chairman was then proceeded with. It seemed that no worthier candidate than Dr. R. Jewell was to be found in this world—or the next. His election was accordingly received with acclamation of a most violent character.

The toast of the Club itself fell to the Chairman. It could have been placed in no worthier hands. In a brief comment on the enjoyable nature of such functions, especially to the older members, the Chairman waxed somewhat Mendelian in his metaphor. Just as your pedigree white haired terrier occasionally gave himself away with a black and tan " throwback " in his offspring, so their older members were that evening able to " throw back " with pleasure and freedom to the occasional indiscretion of their seemingly spotless youth. He felt strongly that they must always keep in mind the hint of youth embodied in the Club's name, and at all times be active in the introduction of new and younger members. In this way they might escape the inevitable fate of any Club confined to the men of one year alone.

The election of the new members for the year then took place. As a result of the proposals and voting, the following were admitted to the privilege of membership : M. Jago, C. H. Mills, L. Wright, H. W. Drew, G. F. Mullaly, G. Tudge and J. Pye-Smith.

In reply to a vote of thanks accorded in recognition of his valuable services as secretary, Dr. Porter Phillips minimised his activity with the most becoming modesty. He suggested Dr. Murdo Mackenzie as his natural successor, but members were loth to lose his services, and after some discussion as to the creation of a joint post, it was agreed to bring the matter of a new secretary forward again the following year.

The proposal of the Chairman's health proved an easy matter to Dr. Jewell, who aptly echoed the general feeling in his allusion to the renowned sporting activities of their old friend " Fatty." This toast was honoured by all present with the greatest enthusiasm.

Songs by Miss Rosa Deller and Mr. Leonard Salisbury, and humourous items by Messrs. Nichols and Howe, had been most suitably placed between the various official proceedings, and these artists now returned to complete the excellent programme arranged by Dr. Porter Phillips. Miss Deller's soprano was heard to advantage with the rich bass of Mr. Salisbury in a duet founded on an old folk song, while Messrs. Nichols and Howe further explored the humorous possibilities of their joint gifts at back chat, punctuated with piano and banjo. Among other things, they succeeded in the production of a healthy rivalry between two sides of the table as to the loudest humming of a certain little tune.

But our entertainment was not to be limited to professional efforts. Dr. P. N. Randall let himself go at *The Exciseman*, and gave us a rendering of which many a fellow half a century his junior might well be proud. As a result of great provocation from Dr. French, the Chairman seized a wine list and sang with much feeling one of the songs of his " Nigger " days. Half way through the third verse he hastily confessed himself unable to remember another blankety word, but his profuse apologies were drowned in applause of the heartiest nature.

At a later hour, when hands were joined for the singing of *Auld Lang Syne*, we found ourselves unable to remember a more pleasant evening, a more marked absence of the lengthy and boring speech, or a more complete dissemination in a small company of the true spirit of good fellowship; but then, as the song says, " It's a way they have in the hospital."

A Cruise to the West Coast of France.

By E. H. Roche.

[*From a Log which was awarded the Deep Sea Challenge Cups for* 1927 *by the Royal Corinthian Yacht Club.*]

SINCE 1922 *Albatross* had not been south of Dover. For five years our sailing had been confined to the Crouch and Blackwater, with occasional sallies up the coast to Lowestoft or down to the Medway or across to the Schelde and Zuider Zee. But, though we could not have wished for truer winds or better sailing conditions, there was a certain lack of variety about all these flat, low-lying countries with their shallow, anæmic seas, and the navigation of the unending banks and shoals that abound in those waters was beginning to lose its thrills and at times to savour of monotony. So when at length we were able to take a whole month's holiday we turned with one accord to the West Coast of France, which for a long time had been stirring our imagination. We longed to sail upon clear blue water, to ride upon the gently undulating Atlantic rollers, and to see those ancient barriers which had broken the strength of countless ocean storms.

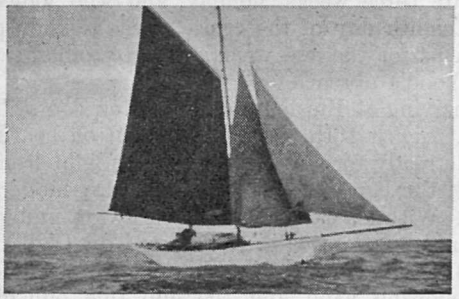
There appeared to be three routes to Ushant, and it was not easy at first to decide upon the best. We might, for example, have coasted the whole way along the North Coast of France, or made our way down the South Coast of England and then across the Channel, or, given an easterly wind, we might have made direct passages from Dover to Guernsey and from Guernsey to Ushant. The last route was ruled out on the ground that even if an easterly wind had favoured us for the first passage it would have been very unlikely to hold for the second, and we should then have found ourselves faced with a head wind in very exposed waters to the west of Guernsey with a very long beat to the nearest weather shore. In any case, we were impressed with the difficulties of ap proaching Guernsey from the north-east, where we might have had to wait many hours for the tides to set in our favour. The North Coast of France offered no difficulty as far as Cherbourg, but beyond the Cap de La Hague the outline appeared to become very irregular, and, owing to the prevalence of northerly winds, we thought it might be rather too exposed for quick coastal passages. So we decided to beat along the South Coast of England to Start Point, or possibly to Falmouth, where we should have every reason to expect a fair wind for Ushant.

The crew were all medicals from Guy's Hospital and consisted of R. E. R. Palmer, who signed on for the whole period, and G. N. Wood, who had a bare three weeks' holiday, and who joined on the eighth day of the cruise. Nils Eckhoff came with us for the first week and did yeoman service in Wood's absence.

Arriving at Burnham on the afternoon of Tuesday, August 16th, we went straight on board and made ready for sea. The wind was light from the west, the barometer 29.8 and the day moderately fine. Without pausing for lunch we got under way at once for Ramsgate. We passed the Club House at 3.15 p.m. just before high water and, carrying a following wind and the ebb tide out of the Crouch, we passed the Whitaker at 5.30 p.m. It was here that I discovered with dismay that our chart of the Thames Estuary had been left in the train. With low water approaching we dared not venture across the Sunk Banks without charts, so, skirting the Barrow, we made our way down the Middle Deep against the ebb, keeping between the buoys until the Edinburgh Lightship bore S. × E., when we steered straight for it. We passed the Tongue Lightship at 11.30, where the flood tide into the Thames held us strongly. Entering the white sector of the North Foreland we steered S.S.E. and then South, keeping about a mile distant from the coast till Ramsgate lights bore west. We then made for the entrance and brought up alongside a mud barge on the East Pier at 1 a.m. It was very dark and we did not at first realise how repulsively dirty was the thing we had moored to. However, we were rather tired after the first passage at sea and were well content with any berth that promised a good night's rest. So we put out every fender we could muster, took out the kedge and made it fast amidships, and turned in. But only a short sleep was allowed us, for at 6.30 a bustling tug came piping along for its barge and we had to turn out to tend our warps. Passing a few yards further along the pier we tied up to a large motor boat and again went below, hoping for the best. In about an hour's time, however, the owner came aboard and proceeded to start his engine and without any warning cast us adrift. So we swept alongside the pier and tied up to the moorings and endeavoured with a good breakfast to compensate for a bad night.

Wednesday, August 17th

It was with much relief that we got under way again at 12.30 p.m. The wind was light from the south, and the barometer had fallen slightly to 29.76. We were just able to make the Gull Lightship on the starboard tack, but shortly after going about we found that the tide had turned against us and, as the wind was becoming very light, we ran in close to the shore about a mile from Deal and came to anchor. The afternoon was spent resting, and at 8.30 p.m., slack water, we set sail



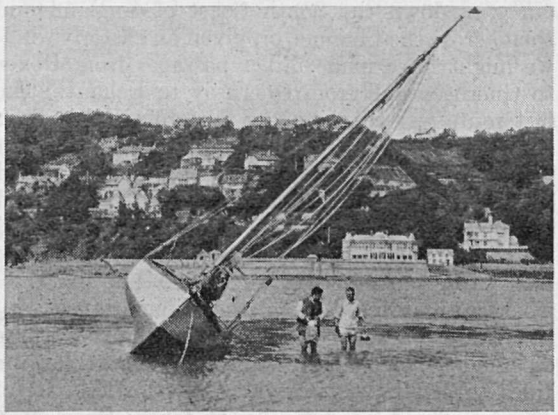
Albatross under way.

for the South Coast. The wind had gone round to the S.E. and was beginning to freshen, and we took the precaution of lashing the canvas cover on the dinghy. At 9.30 we passed Dover and set course S.W.×W.$\frac{1}{2}$W. on Dungeness, which we picked up about half-an-hour later. The wind was freshening considerably, and the glass falling hourly. Squalls began to blow up from the S.E., and each succeeding squall was a little heavier than the last. Needless to say, we were tearing along at great speed and the dinghy was riding with its nose cocked up at an angle of about 30°. At 12.30 a.m. Dungeness bore N.W. The distance from Dover was 18 miles, so that for three hours we had averaged six knots. Beyond Dungeness we ran into rather a confused sea, for the wind had backed to E.S.E., while at the same time a large swell was rolling in from S.S.E. Our course was W.×S.$\frac{1}{2}$S. on the Royal Sovereign, so although we had the wind well on the quarter we were running broadside to the largest seas.

We kept a sharp look out over the port beam and quarter, presenting as much of the counter as possible when a big comber was seen approaching, but in spite of the utmost vigilance steep waves would occasionally leap close up on the weather beam and discharge a torrent of water upon the helmsman or into the cockpit. Gradually the wind got stronger, and at 2 a.m. a very heavy squall drove up from the S.E. Waves were breaking spontaneously with uncomfortable freedom, and when a particularly heavy green sea broke into the cockpit we took it as a signal to reduce our speed. So all hands turned out in the heavy driving rain to reef the sails. We took down the mainsail and jib and tied three reefs in the mainsail. We then set the storm jib, took in the foresail and hoisted the treble-reefed mainsail. Even then we were travelling quite as fast as was safe. The dinghy gave no trouble, thanks to the waterproof cover. The wind veered to south, but the rain continued without interruption all night. We had hoped to carry on to the Solent, but on reaching Beachey Had we were rather tired and famished and so very wet that we decided to put into Newhaven. We arrived there at 9.30 a.m. It was surprising how quickly a hot breakfast and a few hours sleep restored our spirits, and we spent the rest of the day ashore.

Friday, August 19th

It was a fine morning with a fresh to strong wind from W.N.W. We got under way at 11.15 a.m. for the Solent under all plain sail. On getting clear of the harbour we found a very unpleasant swell from S.W. making progress on the starboard tack very difficult and so wet that we were obliged to shorten canvas by taking in the foresail. The port tack, however, was much more comfortable and, setting the foresail again, we made good speed. We made short tacks close in shore where smoother water was encountered. It had been our intention to make the Owers by 5 p.m., when there would be six hours of west-going tide to carry us on to the Wight. But the wind was foul, and we were



Albatross at Salcombe. A Characteristic Pose.

so held up by the swell on the starboard tack that we fell very far behind our programme. In fact, at 11 p.m., when the last of the west-going stream was spent, we were only just approaching Littlehampton. The skipper, realising that the next six hours would be spent stemming a contrary tide at the Owers, suggested putting in to Little-

hampton, but the crew declared themselves fit for a night's sail and were strongly in favour of holding on for the Solent. It was too dark to attempt the Looe Passage, where there were no lights of any description, and the only safe course was to go right out to the Owers Lightship, So we headed S.W., close hauled on the starboard tack. The swell, striking our bows end on, was very trying. The wind was getting rather strong for full mainsail, even with no foresail set, and in the briefest intervals of calmer water we quickly gathered speed only to crash heavily into the next big wave. But we did not reef as we feared that we should then make no way at all. At 12.30 a.m. it was satisfactory to pick up the Owers Light on the starboard bow and to know that our course would take us well clear of the Outer Owers Bank and the tide bauble extending about a mile eastwards from it. The flood tide held us strongly all night, and at 5 a.m., although well outside the Owers Lightship, we were still about a mile to the East of it. At 5.30 a.m. we were laid over by a heavy squall in which the wind backed suddenly to W.S.W. The south-westerly swell was quickly reinforced by this wind and the waves grew to enormous proportions, the more so as the ebb tide gathered strength. The waves were not, however, tending to break, and provided one took them at about 45° were not at all dangerous, and allowed us, in fact, to make very good speed with our sheets slightly free. We were not distressed by the full mainsail, and the high peak was a great asset in the troughs of the large waves. It was a fine and thrilling game charging up and down the slopes of these great mountains of water. We laid a course N.W.×W.½W. on the Nab Tower. Gradually the wind got stronger, and at 7.30 a.m., when about a mile E.S.E. of the Nab, it suddenly began to blow like fits from the S.W., with heavy driving rain. Thinking it was only a passing squall we took only two reefs in the mainsail and set the small jib. The wind continued to freshen to gale strength, and squall after squall laid us over and compelled us to luff. It might have been wiser to take in the third reef, but we hoped for some shelter under the lee of the island. The rain was very dense and visibility was limited in most directions to about half a mile. The Isle of Wight was completely blotted out, and we saw nothing of it until close to the Forts leading into Spithead. Between Ryde and Cowes there must have been nearly 50 boats of every description riding to anchor as close as they could get to the weather shore. We were tempted to follow suit, but thought it would be more comfortable in a good harbour, and so held on to Cowes. We arrived there at an unfortunate time, for the tide was ebbing from the Medina River and flowing eastwards in the Solent, and in trying to beat into the harbour we had the former tide against us on the starboard tack and the latter against us on the port tack, and our difficulties were not made any easier by the scores of enormous yachts occupying the Roads. At length, however, we made our way in and picked up a mooring close under the lee of the town. It was then 12.40 p.m. Making a hasty stow of the sails we went below and applied ourselves to the agreeable process of resuscitation. Going ashore in the evening we were very thrilled to find the evening papers all agog with excitement about the "wildest seas of the wild summer." We had not realised that it had been exceptional, and were highly pleased with our little craft for bringing us through so comfortably.

Sunday, August 21st

It blew hard from S.W. all day. The glass fell from 29.52 at 10 a.m. to 29 at 3 p.m. Showers of rain were frequent and heavy. In the evening we had a very pleasant diversion in the form of an invitation to dine with some friends at Puckhouse, near Binstead. We returned at a late hour not only repleted in mind and body, but laden with farm produce of every description.

Throughout the whole of Monday the gale continued with undiminished vigour. By Tuesday the weather had begun definitely to improve. The glass was rising quickly—29.7—and the wind was moderate from the west. For the first time since Friday the inverted cone was lowered from the signal station. Unfortunately, Eckhoff was due again in London, so we speeded him off on the 1.30 boat for Southampton. He had been singularly unlucky in choosing probably the vilest week of the whole summer for his first experience of cruising.

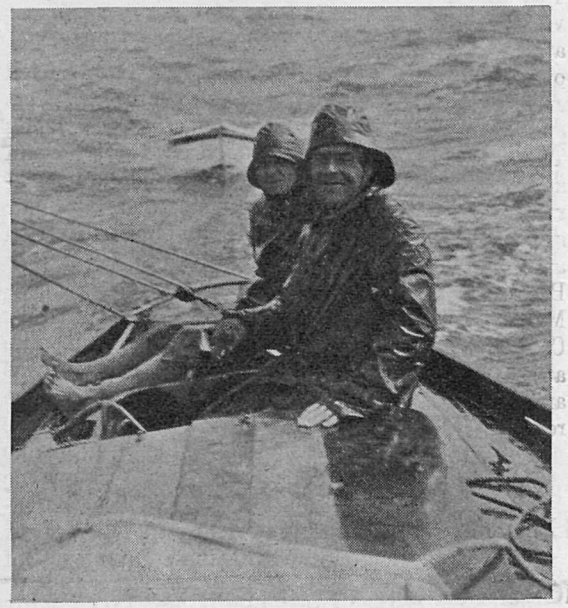
The remainder of the day was spent in doing various jobs to the rigging and waiting for Wood who, owing to a misdirected telegram, did not come till the following afternoon. Among other things, we renewed the lanyards of our main shrouds with five parts of 48-strand Norwegian whale line. Ratsey guaranteed that two parts of this rope would have lifted the boat out of the water, and though it may seem unnecessarily stout it added greatly to the morale of the crew.

Wednesday, August 24th

The barometer had risen to 29.94, and the day was mostly fine with occasional heavy showers and thunder. The wind was westerly, varying from light to strong. Wood was received with loud cheers at about half-past four, and immediately we began making preparations for getting under way. Unfortunately, the Solent stream would not set to the west till 9.15 p.m., and, as the wind was

westerly and falling rather light, we decided that there was nothing to be gained by attempting to start before slack water. So we took time to prepare at leisure for a night's sail and fortified ourselves with a good dinner and stored the larder with an abundance of readily assimilable food.

We got under way at 9 p.m. The breeze was then very light and beating even with the tide under us was very slow work. By midnight Lymington bore W.N.W. Just as we were approaching Hurst Castle, however, the first of a series of thunderstorms blew up with much wind and some rain, and we shot out through the Needles Channel at a most embarrassing speed. At 1.45 a.m. we set the log at zero, Needles bearing



Battened down off Bolt Head, near Salcombe.

E.N.E. about 1 mile. We had a hard tussle with the tide off Anvil Point in the early hours of the morning, but gradually forged ahead and passed St. Alban's at about 7 a.m. and fetched the Shambles by 11. We passed the Bill of Portland at a distance of 3 miles, but did not quite escape the tide bauble. We then set course W.$\frac{1}{2}$S. on Start Point, and soon lost sight of land in the midst of Lyme Regis Bay. The wind was moderate from N.N.W., and we were going along well. At 1 p.m. the log registered 42 miles, and at 4 p.m. 56. We then altered course to W.$\frac{1}{2}$N. to identify a headland on the starboard bow and to escape the tide, which was beginning to make eastwards. It was 6 o'clock before we were abreast of Berry Head and, as the tide would run strongly against us until about 11 we gave up our original intention of rounding the Start and made instead for Dartmouth Harbour. At 7.45 p.m. we passed the Mewstone and took in the log reading 72.4.

We found Dartmouth in the throes of the Royal Regatta. The harbour was packed with yachts, and it was with the utmost difficulty that we threaded our way between them and found room to anchor in the little bay above Kingswear. Ashore we were entertained by a brilliant display of fireworks. In the morning it was a magnificent spectacle to see so many yachts in full regatta dress with bunting streaming from every mast. *Britannia*, *Westward*, and others of the big class were there, and all looked very fine.

Having a small rent in our jib, and knowing that it would be quite impossible to get anything done at short notice in Dartmouth, we got under way at 10.45 a.m. for Salcombe, where we hoped to find less competition for the services of the local sailmaker. The wind was very light and uncertain, and we had to sweep out of the harbour and for the first hour or two our progress was very slow. We watched the beginning of a race for half-deckers, and saw several other races in progress, including the 15 metre class. Presently the breeze freshened a little from the west. We had not thought it necessary to put on the dinghy cover for so short a passage, but off the Start we ran into a very troublesome bauble and the dinghy began to fill rapidly. We hove to and found that the dinghy was just buoyant enough for Wood to get in and bale her dry. We entered Salcombe early in the afternoon and, while sailing past the town wondering whether to run round into the Bag or anchor in Ditch End Cove, the dinghy quite unexpectedly swamped, turned turtle, and dived, in accordance with its ancient habit. We tried to gybe with a view to reaching Ditch End Cove, but the dinghy dragged so heavily on the stern that she would not answer the helm. The tide in the mean time was sweeping us up rapidly, and we had to let go the anchor in about 7$\frac{1}{2}$ fathoms off Pool Point. We paid out 27 fathoms of chain.

Taking our jib ashore at once we were amazed to find that there was no sailmaker at Salcombe —all sails for the local yacht club being made at Burnham and all repairs being sent to Plymouth. However, we managed to find a sailor of the old school who had some materials and could do small repairs, and he set to work immediately and made a rough but serviceable job of our sail.

Saturday, August 27th

Low water Salcombe was at 2 p.m., and the Channel tide turned to the west at 11.25. The wind was blowing strongly from the west, and the

Coastguard Station hoisted a cone. However, the barometer was steady and we did not think the weather looked very bad, so we got under way with two reefs at 11 o'clock. It was our intention to run out into the Channel and if encouraged by the outlook to lay a course S.W.$\frac{3}{4}$S. on the Four Channel. Unfortunately for our best laid schemes we grounded upon a sandspit running out from Mill Bay, opposite the town, and failed to get off. The tide ran out very quickly and we were soon able to wade ashore. We took a picnic lunch on to the beach and spent a few very pleasant hours disporting ourselves on the sand. We floated off at about 4 o'clock, but rather than beat out against the spring tide we ran up to the Bag and dropped anchor for the night. We could not understand why the cone was still up, so we telephoned to the Metereological Office for a weather report, but they had apparently shut down for the week-end, and we got no satisfaction. We learned, however, that numerous tradesmen were equipped with wireless sets, and we found them extremely obliging and it was through the local shoemaker that we heard the Daventry shipping report which was not at all reassuring. It predicted south-westerly winds fresh to strong in the Channel, and a westerly gale on the South-West Coast.

Sunday, August 28th

The wind was strong from the south-west, but the weather did not look very bad. So we got our anchor up at 10.30 a.m. and set out with double-reefed mainsail, reefed staysail and small jib. The cone was still up. Wind against tide threw up a considerable chop in the harbour. A motor launch which had gone out in front of us came back and the pallid faces of the crew gave warning of what to expect on the bar. So we battened down and prepared to face the music. The sea was steep and irregular but, taken carefully, there was nothing of any serious danger to a fully decked boat. Once clear of the bar it was much smoother, though we found a slight bauble off Bolt Head and again off Bolt Tail. In view of the unsettled weather and the foulness of the wind we decided to be content with a short run down the coast, so we set course W.N.W.for Fowey. The sky kept almost clear and the wind was a very pleasant two-reefer. We passed Rame Head at about 2 o'clock and greatly enjoyed picking out such quaint little places as St. Germans, Looe and Polperro. At 7.15 we entered Fowey Harbour and came to anchor under the lee of Polruan. There was, however, a considerable swell rolling in, and we thought it might be more comfortable round the first bend of the river. So we got up sail again and running round the bend came to anchor just above the ferry which crosses to Bodinnick and, at the suggestion of the Harbour Master, we took a stern rope to the buoy marking Carn Rock. Here we had a very quiet night. It appeared, however, that the Harbour Master was anxious to discourage yachts from mooring in that reach. (*To be continued.*)

A Case of Renal Calculus complicating Pregnancy: Nephrectomy: and spontaneous delivery at full term.

ELIZABETH F——, æt. 27, was first seen at her home in August of this year complaining of breathlessness and abdominal pain. Previously she had three attacks of rheumatic fever at the ages of 16, 23 and 25 ; since her first attack she had suffered from dyspnœa on exertion. She had a normal confinement six-and-a-half years ago. When seen in August it was found that she was 28 weeks pregnant, the size of the uterus corresponding to the dates given. She was sitting propped up in bed, evidently very short of breath and slightly cyanosed. Her pulse, 100, was regular, of good volume, and water hammer in character; the temperature was normal although she looked "septic." There was generalised abdominal tenderness, but marked tenderness was localised in the left loin and the pain, which was spasmodic, was described as a "bearing down" pain. When asked if she thought she was commencing labour she confessed that she did. There had been, however, no "show," nor was the os dilated on examination, and the uterus remained relaxed during the pains. The heart showed left-sided enlargement, the apex beat being situated 5 inches from the mid line in the sixth intercostal space. Numerous bruits were heard and a diagnosis of mitral stenosis and aortic regurgitation made. Five minims of tincture of digitalis, 4 hourly, was given and 2 drachms of paraldehyde at night. The urine was a thick, dark red and was found to contain large quantities of blood and some pus.

When seen the next morning pulse 115, temperature normal and the pains very severe. Per vaginam there was no change. The tenderness in the loin, however, was now exquisite, and the whole abdomen more tender.

The possible diagnoses considered at this point were :—

(1) Embolism of left kidney ;
(2) Pyelitis of pregnancy ;
(3) Renal calculus ;
(4) T.B. kidney.

Embolism seemed a possible cause of the trouble, but the pain was increasing, as also was the amount of blood passed, while one would suspect the reverse with embolism. Pyelitis seemed less probable in view of the absence of temperature, and of the symptoms being left sided. Absence of previous attacks by no means excluded renal colic, which seemed the most likely diagnosis in view of the severe paroxysmal pain, which seemed more severe than is usual in cases of tuberculous kidney.

The difficulty in assessing the pain factor in a pregnant woman was fully appreciated, but on questioning her husband one gathered that she was exceptionally brave in all previous ailments. With this provisional diagnosis of renal colic she was admitted into Guy's. Cystoscopy and ureteric catheterisation showed blood and pus coming exclusively from the left ureter. Her blood urea was not raised. X-ray examination showed a large branching stone filling the pelvis of the left kidney. Nephrectomy was decided upon and performed through a loin incision ; the operation was highly successful and recovery was rapid except for slight sepsis of the wound. She was discharged three weeks later.

She was readmitted into Guy's for her confinement in October, when a hernia at the site of the scar was noticed. Her blood urea at this time was still normal and the urine was free from blood and pus. Labour was short and spontaneous delivery occurred in under four hours from the onset of labour pains. Both patient and child did well.

The case was exceptionally interesting from a point of view of diagnosis and of treatment, considering :—

(*a*) The condition of her heart ;
(*b*) Whether her pregnancy would terminate spontaneously after operative interference ;
(*c*) Whether labour should be induced prior to nephrectomy ;
(*d*) Following nephrectomy the chances of an ascending pyelitis of her remaining right kidney.

In addition, it is distinctly uncommon to get a hernia through a kidney incision.

My thanks are due to Dr. Marshall for permission to publish this case.

J. R. R.

"The Adventure of Lady Ursula."

ON Monday evening, November 28th, 1927, Miss Ethel Donaldson and her band of enthusiastic amateurs presented the play *The Adventure of Lady Ursula* to a crowded and expectant house at the Scala Theatre. The play, had it been staged in these enlightened times and not in the Georgian era, might well have been called " The Eternal Masquerade," the essence of the plot being the disguise—and subsequent adventure—of the Lady Ursula as a young nobleman. This premonition of modern fashion was well brought out by Miss Donaldson as the Lady Ursula, who became progressively more manr ish from her conception of the disguise to gain a hearing of " Sylvester "—who had long forsworn feminine society—to the orderly room scene where she dramatically forced the issue by choosing " pistols, one loaded and one unloaded."

We could not help feeling a trifle anxious as to the fateful possibilities should the redoubtable Sylvester have met the young Frank. However, we were relieved—as all audiences are when a cruel crisis is averted—when Lady Ursula, attired as her youngest brother, persuaded Sylvester to abandon his duel with Frank, the eldest brother.

Sylvester, skilled in the deceits of the sword, was naturally intrigued in the true identity of this younger brother. He followed to Edgeware, and though himself no longer deceived, " used his knowledge " to a most fruitful and blissful end. Of the scene in the guardroom, where the finer comforts of the soldier's life were so well portrayed, we have only one criticism, which being that even the Rev. Plimbo's vocabulary was at times far more virulent than we heard from the gentlemen of the guard. License, God forbid, but such good old phrases as " Zounds, sir ! " " By my halberd ! " and the like are surely permissible. No doubt they were overawed by the bullying personality of Mr. Dent, who made it a point of honour to see a quarrel in everything and to push it as far as the duel once he felt sure of his own chances.

The Rev. Plimbo, in whose pristine hands the true tone of the play was so jealously guarded, cannot be passed by without due admiration for his vivid portrayal—invidious, no doubt—of a very rascally character. We are as proud of our Churchmen as Plimbo was of his Bandana handkerchief.

The inevitable tangles that herald the close of a play were speedily straightened out by the vigorous re-appearance of Frank. Had this not been so Sylvester could not have attained the hand of the Lady Ursula with such forethought and immunity as he did.

Much as we should like to dwell upon the individual attainments of all the cast, whose every word was clear, we should be ungrateful were we not to recall the author of the play—Sir Anthony Hope. For the play was, after all incidental expenses had been deducted, the direct means of raising £274 for that noble body of souls—Guy's Hospital.

We cannot conclude without also expressing our warm appreciation of the excellent performance of the Guy's Orchestral Society, under the leadership of Sister Johnston, and the direction of Mr. Epstein, and also of the very valuable assistance accorded the organisers by Miss Sydney, of the Appeal Office—none the less valuable because it was done in the background.

Our thanks, too, to Mr. Steward for his masterly speech at the close of the performance.

The Poet of Guy's.

THE gods, for ever good and wise,
Have looked with favour down on Guy's.
But whose known name that ends in *ist*
Is it that great Apollo kissed?
Who of that far-famed glorious school
Has drunk of the Pierian pool?
Who? Who has in these later days
Plucked from Olympus odorous bays
To make unto himself a crown,
And bring to Guy's still more renown?

Speak, you who know! Has still more thirst
For glory smitten A. F. Hurst?
For who can tell ambition's scope,
And what can bound a great man's hope?
It may be that the one who knows
The stomach hides desire that goes
Still higher! Who can measure brains
That wrought the marvels of Seal Haynes?

Or is the soul that would aspire
Above bacteria your John Eyre?
For surely glittering fancy rules
In all our great bacterial schools.
Their very words aloud proclaim
Imagination's glorious name!
Is it John Eyre whose soul has been
Raised heavenward by a new vaccine,
Or to the very gods akin,
Blesses he some new agglutinin?

Or is it, is it T. J. Evans
Whose music thrills the highest heavens?
Who thus by Polyhymnia blessed
Has secret gifts at last confessed?
Has the divine afflatus proved
That Guy's biologist is loved
By Phœbus? Can it be he sings
And chants to biologic strings?

It may be some would seek to claim
For poetry another name,
Ignoring these. Is Pembrey he
So great in physiology?
Ah, would he dare to roam so wide
From wondrous deeds in man's inside,
Deserting catalysts for cates
What time the eager printer waits?
No, no, by all the liver's lobes,
Pembrey can claim no poet's robes.

Who then has wrapped them round his form
To keep his secret ardour warm?
I know, I know, and would proclaim
In swelling odes his sacred fame.
No, 'tis not Hurst and 'tis not Eyre,
Not Evans, who can wield the lyre.
It is not Pembrey, greatly skilled,
Who is by godlike rapture filled.
'Tis he who by microscopy
Determines fate. Yes, it is he
Who over sections of the dead
Or living bends his thoughtful head.
Behold, Apollo's favoured one
Is found to be great Nicholson!
G. W., who gave the nation
His views on Tumours, their Formation.
And now his odes, so some folks say,
Will soon adorn the *B.M.J.*!

MORLEY ROBERTS.

Correspondence.

Liverpool and North-Western District Guy's Re-union Dinner.

DEAR SIR,—Several men who have been in the habit of attending the above dinner have met and have decided that it would be better to hold it every other year, to alternate with the Biennial.

Accordingly the dinner will not be held until 1928.

Yours faithfully,
HORACE MATHER.

73, Rodney Street,
Liverpool.
November 29th, 1927.

The Operations of Surgery.

DEAR SIR,—Our attention has been drawn to your review of the seventh edition of this famous work, in which reference is made to the omission of the name of Jacobson on the title page. As this review has been followed by a letter on the subject, which you inserted in your next issue, we feel it well to say that we greatly regret that any of the many admirers of the late talented author should feel grieved because of the omission in question.

As Mr. Jacobson has not written anything in this book since the year 1907 it was felt to be justifiable now to delete his name from the title page. We feel we are in good company when we can refer to the fact that Kirkes' name is now omitted from succeeding editions of his well-known book on physiology.

While we recognise that Jacobson, Kirkes and other distinguished authors laid good foundations, it is often desirable to emphasise that *living* authors are responsible for the whole of a present-day text.

In the preface written for the current edition Messrs. Rowlands and Turner write of their former brilliant teacher in the following generous words :—

"This book was first written by that incomparable and gifted teacher, the late Mr. W. H. A. Jacobson, who, endowed as he was with great natural and literary ability, extensive surgical knowledge, ripe judgment and endless energy, was able to make the book an immediate and lasting success. Jacobson devoted over 20 years to succeeding editions, allowing himself hardly any spare time, and often working in the small hours when he ought to have been asleep. Let us hope that the book may remain a lasting memorial to his genius and industry. We have spared no pains in our humble endeavours to maintain its high reputation."

We feel that your readers should know of this side of the matter as well as of the side put before them by your reviewer and your correspondent.

We are,
Yours faithfully,
J. & A. CHURCHILL.

40, Gloucester Place,
Portman Square,
London, W.1.
November 29th, 1927.

Reviews.

Practical Physics for Medical Students. By MARY D. WALLER. 87 pages. Published by Messrs. H. K. Lewis & Co., Ltd., London. *Price* 6*s*.

IN writing a manual on *Practical Physics for Medical Students*, the author is called upon to describe methods for carrying out certain, more or less, stereotyped experiments. It is therefore inevitable that books of this type should differ but little the one from the other. This the author has fully recognised, since, referring to experiments described in the book, she remarks, "Very many of them are experiments which are performed in every elementary laboratory."

The description of the various experimental methods lacks something in being, if anything, too brief, and the tyro would be greatly helped in understanding some of the experiments if a few simple diagrams were available.

The student will find several interesting examples of the application of experimental physics to physiological problems.

The author has described in the limited space of 87 pages some 300 to 400 experiments, and the reader feels just a little sorry for what seems to be overcrowding.

A number of useful physical and mathematical contents have been included in the book.

For the book to be of the greatest use to the student it should be read with the apparatus required for the particular series of experiments set out for inspection.

Clinical Researches in Acute Abdominal Disease. By ZACHARY COPE, B.A., M.D., M.S.(Lond.), F.R.C.S.(Eng.). 2nd Edition. Published by the Oxford Medical Press (Milford). *Price* 10*s.* 6*d.*

A SECOND edition of this work contains an additional chapter on the extravasation of bile and further researches on the nature of shock. It is of interest in that it deals with the clinical diagnosis of the acute abdomen rather than the rather more laborious laboratory methods, which methods, on account of the urgency of the case, are often inaccessible. Nevertheless, far from pouring scorn on penny-in-the-slot methods of diagnosis, the author calls for a firmer collusion between clinical and laboratory workers.

The chapters on cutaneous hyperæsthesia and phrenic shoulder pain are perhaps the most interesting; in the former the author demonstrates with an interesting series of cases that localisation of cutaneous hyperæsthesia, although by no means diagnostic, is on the whole more reliable than that of localised tenderness. Phrenic shoulder pain, he points out, is of considerable diagnostic importance. A chapter on the differential diagnosis between the acute thoracic and acute abdominal lesions stresses the collective significance of minor observations. This chapter justifies its place in the work more fully than a later chapter entitled extravasation of bile, in which the reader is treated to some interesting cases, but the reviewer thinks that such space were better filled by emphasising many other diseases such as typhoid, tabes, tuberculous peritonitis and others which on occasion may so closely simulate an acute abdomen.

A very instructive book, well written and illustrated by quotation from a very large collection of interesting cases.

Richard Bright and His Works. By Sir WILLIAM HALE-WHITE, K.B.E., M.D. Published by The *Lancet*, Ltd. *Price* 2*s.* 6*d.*

THIS pamphlet, which is issued as a Supplement to the *Guy's Hospital Reports*, was originally published in the *Reports* of 1921. It consists of a brief account of Bright's career, followed by a summary of his works. The section devoted to his works is wisely confined to the subjects in which Bright made an original contribution of major or minor importance to clinical medicine. The discovery and complete appreciation of renal disease in all its aspects, and even most of its minor details, for which he is renowned, is admirably shown to be only a minor part of an amazing life's work, the remainder being largely forgotten by reason of an insignificance which is purely relative. We can well believe that he would have been famous even without his work on the kidney.

Sir William Hale-White picks out and quotes verbatim on p. 9 Bright's synopsis of the clinical history of renal disease. All considerations of accuracy apart, the literary merit of this striking passage, typical of the greater medical writers of the past, compels our admiration, and perhaps we feel a tinge of regret that in our day of deeper knowledge the mire of jargon in which we seem condemned to wallow is not more often simplified and enlivened by the occasional use of real English as in the passage quoted.

The first section, dealing with Bright's career, no doubt tells us all that can be proved concerning his character and personality stated with a caution and respect for ascertained fact which would have met with Bright's own wholehearted approval. To us who are told nothing but good of him he is necessarily unreal. Without having the least wish to dispute the accuracy of anything we are told, we thirst for more and perhaps have a sneaking wish that the author had taken to himself some of the imaginative licence of the historian and given us the picture of a man we could have visualised doing a round in Clinical, perhaps with the handle of his pet spoon poking out of his tights. It is difficult to believe that his rounds could have been dull, or that a man of his diverse interests could be given to hankering continually back to his favourite subject, but perhaps we may choose to believe that he was just fond enough of it to be known as Granny Kid, and that it was appreciated among his followers that the only royal road to his good graces was to test the urine with promptitude and frequency.

Rugger. By W. W. WAKEFIELD and H. P. MARSHALL. Published by Messrs. Longmans, Green & Co., Ltd. *Price* 15*s.*

THIS fine book cannot fail to be of high interest to members of the Hospital which, in 1843, produced the first club organisation in the history of the game. Rugger fans will devour the entire volume as a matter of course, while those few to whom the sport is not familiar from playing experience will find almost half the book devoted to a highly interesting account of the experiences of one of the most famous players now living, an account written with a literary vigour that breathes the very spirit of the game which inspired it.

We found the autobiographical part, the first of the three sections into which the book is divided, very interesting indeed. Personal sidelights, the outcome of an almost unrivalled experience, are scattered here and there in a most captivating

manner. For instance, " Wakers " has always felt himself unable to play a good game on certain grounds, and among these he has an intense dislike for the Richmond enclosure, that is the scene of so many of our own Cup struggles. " In spite of it being one of the best bits of turf in the country," he says, " I never seem able to play well there. I generally collect minor annoying injuries, and there always seems to be a miserably cold wind blowing." We can certainly bear out the latter part of his comment from our own experience on Cup Tie days.

The second section is devoted to the theory and practice of the game. With the aid of excellent diagrams all the moves and manœuvres now practised are explained and commented upon in a manner that is easily understood, and should be distinctly helpful to the young player.

In the third section the book takes on encyclopædic form, and an exceedingly full account of the club histories, rules, and records is given.

The only difficulty is the price, which is high, but not excessive in view of the general standard of excellence in writing, material and printing. For many there exists the simple solution of one of the circulating libraries. The more fortunate ought to visit Mr. Grattan.

The Endocrines in General Medicine. By N. Langdon Brown F.R.C.P. Modern Medical Monographs. Published by Messrs. Constable & Co., Ltd. *Price* 7*s.* 6*d.*

THE advertisement pages of the modern professional weekly, though devoted partly to ancient history of a quasi-medical nature, are in the main composed of highly-coloured accounts of the therapeutic effects of a galaxy of glandular extracts. Such intensity of commercial effort certainly cuts no ice with the physiologist or biochemist, and we suspect that such reward as it does reap is connected with the experimental practitioner who is willing to try anything that can do but little harm in the vague hope that it may do good. When success follows the use of the omniglandular tablet we have no doubt that the scientist in the prescriber conquers the charlatan, and that the result is rightly attributed to its undoubted psychotherapeutic cause.

It is refreshing, however, to find some exposition of a subject which has suffered so much at the hands of commercial exploitation, coming moreover from the pen of an unquestioned authority. The busy man in practice is apt to miss the point of a physiological dissertation, and has therefore a quite sensible preference for clinical treatment in such literature as he has spare time to read. Such treatment has been accorded endocrine therapy in this very helpful volume. Preliminary chapters on the biological and pediatrical aspects of the endocrines are followed by more detailed accounts of the various components of the ductless system. The important question of absorption of extracts from the alimentary tract in some cases and their complete destruction in others is clearly dealt with, the valuable therapeutic agents being sanely sifted out from their more delicate and therefore less useful brothers. The chapter on the gonads falls perhaps below the general level, especially in regard to the ovary, though the conclusions reached on the Steinach and Voronoff procedures seem commendably sound. There is an admirable chapter on practical endocrine therapy which embodies the valuable results of the author's own clinical experience.

The use of insulin in diabetes falls, of course, outside the intended limits of the volume, but the applications of this endocrine in the treatment of other conditions such as acute hyperthyroidism, anorexia nervosa, and the hepatic toxæmias is fully dealt with. The concluding chapter of this useful work provides many helpful suggestions as to the future of the endocrines in therapeutics.

The Heart and Its Diseases. By C. W. Chapman, M.D., M.R.C.P. 1st Edition. Published by Messrs. E. & S. Livingstone. *Price* 8*s.* 6*d.* *P.* 5*d.*

THIS small book of 213 pages has been written in an endeavour to summarise well-established facts and recognised theories in connection with the diseases of the heart. Following a brief description of the surface and general anatomy of the heart, the author gives his definition of the normal heart as that which " enables the patient to carry on his usual occupation and bear the strain of exertion (exercise tolerance) without discomfort or signs of distress." He points out that cases may occur in which " though organic disease is present, compensation is adequate and symptoms absent." In these cases the history and the physical signs alone remain in evidence of the disease which is present.

The next 30 pages deal with the general inspection and physical examination of the patient. The patient with cardiac disease may reveal the whole secret of his pathology by the appearance of his face. The author describes the pale and thin face, associated with aortic disease, and the flushed appearance present in mitral disease. The physical examination of the patient should not be entered upon until his confidence has been obtained. The author urges the clinician to be methodical, and warns him that " the successful treatment of cardiac disease calls for a wide knowledge of general medicine." The effects of exercises

on the heart are next described and explained, an existing irregularity removable by exercise being of no serious import. The taking of the pulse is no longer a matter of simple routine, but valuable information may be gained by feeling it.

In discussing the importance of cardiac murmurs due to organic lesions, two important questions, which must be answered, are (1) has adequate hypertrophy with consequent compensation been established, and (2) does the symptom of breathlessness on varying degrees of exertion indicate an early or advanced failure of the heart muscle. He goes on to emphasise the importance of the observation now well recognised that "the consequences of rheumatic or other infections are not limited to the endocardium and valves, but affect also the myocardium."

Later he deals, in a competent manner, with such questions as the relation of rheumatism to heart disease, the nervous heart and pseudo-angina and cardio-vascular syphilis.

Chapters which should prove useful to the practitioner are those dealing with marriage and maternity in heart cases and anæsthesia in heart disease.

A chapter is also devoted to the treatment of cardiac disease.

In a book of this size, which is essentially stated to be an "endeavour to summarise" well-established facts and recognised theories, it seems that its purpose has been hampered by the lengthy dissertations on inspection and examination in heart cases, however excellent this discussion may be. Further, most of the information obtained there is unnecessarily repeated in a later chapter, excellent in itself, entitled "Salient Points in Diagnosis." One feels that the author has rather strayed from his original intentions, with the result that his book is incomplete whether considered either as a text book or as a synopsis of cardiac disorders. Much of the information contained in it is very useful, the points made are reasoned with clearness and the deductions drawn would appear to be accurate. Its perusal will repay the few hours spent reading it.

An X-Ray Atlas of the Normal and Abnormal Structures of the Body. By ARCHIBALD MCKENDRICK, F.R.C.S.(Edin.), and C. R. WHITTAKER, F.R.C.S.(Edin.). 2nd Edition. Published by Messrs. E. & S. Livingstone. *Price* 30*s.*; *Postage* 9*d.*

THAT a second edition of this book has been necessary so soon after the publication of the first edition is sufficient proof of the demand there has been for it and of its extreme usefulness. The present edition has been subjected to thorough revision and is somewhat larger than the previous one, owing to the addition of many new radiograms, including a very fine series of plates dealing with lipoidal injections of the bronchi. These show cylindrical and saccular dilatation and brochiectatic cavitation. A short description of the technique of lipoidal injection, for a radiological examination of the bronchial tree, has also been included.

This new edition maintains the high standard set by its predecessor, and will prove of great value to the student and to the general practitioner.

Histology. Catechism Series. 2nd Edition. Published by Messrs. E. & S. Livingstone, Edinburgh. *Price* 1*s.* 6*d.*

THE psychology of the student who endeavours to grasp a subject by pressing innumerable, and often impossible, questions thereon upon himself has, to us, always seemed peculiar; we can but be biased by the comparative permanence of visual impressions.

However, catechism proves popular in certain circles, and the latest member of this series of little volumes is concise, well classified, in adequate detail and priced at a trifle.

Its value is, of course, restricted to those who are on the brink of an examination, and it should be indicated that special methods of staining are not discussed.

Diathermy. By E. F. CUMBERBATCH, M.R.C.P. 2nd Edition. Published by Messrs. W. Heinemann, Ltd. *Price* 21*s.*

THE appearance of the second edition of this work has put everybody interested in diathermy to a necessary additional expense. The first edition was already the only good book on the subject. Dr. Cumberbatch has now enlarged and rewritten his work to such an extent that the first edition becomes relatively out-of-date and useless.

There is, for instance, a new and important chapter on the path and distribution of the diathermy current through tissues offering different resistances, the work of the Physics Department at St. Bartholomew's Hospital. There is an epitome of his work with Robinson on the use of diathermy in gynæcology, and also quite a comprehensive review of modern diathermy methods and technique in surgery.

Dr. Cumberbatch never uses an electrical current without having a reason for so doing, nor does he allow his enthusiasm to claim results which he has not obtained.

The book is a clear, unbiassed review of the position and value of diathermy as it exists to-day.

Sport.

Rugby.

Guy's *v.* Richmond.

PLAYED at the Athletic Ground, Richmond, on Saturday, December 3rd, and resulted in a draw, each side scoring a goal (5 points).

Owing to injuries and the calls of the International Trial, both sides were poorly represented, and their back divisions were reorganised.

Garland, Ryan and Lewis were unable to play for Guy's. Preen moved from stand off half to right centre and G. J. Clarke completed the three-quarter line.

J. R. Barnes and I. K. Thomas came in at half back.

Richmond had Palmer, Aslett and Turquand-Young away, but their substitutes played extraordinarily well, and on their form fully deserve places in the premier fifteen.

It was an evenly contested game, although the play at times was distinctly ragged and patchy.

Our forwards were well held by the Richmond pack and were unable to get the ball so easily as they have done in previous games this season.

P. D. B. Spence at full back again played a sound game for Guy's, his tackling and kicking being well nigh perfect.

Robinson ran strongly on the wing, whilst Popplewell, Myburgh, Durr and Malone were conspicuous amongst the forwards.

The first half was fought out at a fairly good pace, and the ball quickly travelled from one end of the field to the other. As a result of the packs following up both full backs were given plenty to do, and they carried out their tasks admirably. Spence was the better of the two, but only so far as his kicking was concerned. On several occasions Cass saved his line in dramatic fashion by first class tackling and sure handling of the ball.

Malone had hard luck when with nobody to beat, he was adjudged to have received a forward pass.

Early in the second half Richmond lost Peart, one of their forwards, who was injured by a kick on the jaw.

Curiously enough from this point Richmond took command of the game and had the better of the play that followed.

A splendid run by R. A. Barr nearly produced a score, but Spence tackled him on the line. The home side pressed heavily in our 25, and eventually Guy's were penalised, but Hamilton failed with the kick.

Soon after, the Richmond threes all participated in a fine round of passing, and C. B. Green was able to cross our line for Hamilton to convert from an easy position.

Stung by this reverse and with only 10 minutes left for play, the Hospital warmed up and immediately set up a hot attack, which Cass temporarily repulsed.

Only two minutes remained for play when Preen, picking up in mid-ffeld, made a glorious run, weaving his way through the whole Richmond defence until he came face to face with the full back. He might have run round Cass, but with Durr backing up closely he made sure of things by giving him a pass that enabled him to score near the posts. Durr converted and made the scores equal.

Guy's Team—P. D. B. Spence ; T. G. Robinson, V. R. Preen, F. H. B. Spence, G. J. Clarke ; I. K. Thomas, J. R. Barnes ; J. R. F. Popplewell, W. H. Myburgh, G. G. Cameron, B. G. Scholefield, J. Durr, C. D. Malone, J. H. Cullinan, A. Simpson-Smith.

Association.

Guy's *v.* Old Westminster's.

THE Hospital received the Old Westminster's on Saturday, November 26th, and although a dense fog in the morning had threatened the cancellation of the game, the " air " had cleared in time for Guy's to kick off about the usual time. The first half was strongly in favour of Guy's, and inside 20 minutes were two goals to the good, the first being the result of a fine effort by Cantor, who had worked across to the right wing and put in a beautiful shot from long range which went just beneath the bar. The second was scored by Small after an individual run, Guy's leading at the interval by 2–0.

On resuming, the Old Boys pressed and, getting our defence in difficulties, reduced the lead. Soon after this success the visitors had the mortification of seeing the ball cleared from Guy's goal mouth, when a score seemed certain—the ball having stopped in the mud right on the goal line. Small then got away and keeping good control scored the third with ease. Hereabouts a little slackening was observed in the Hospital side, and the penalty was paid when the Old Boys promptly added their second goal. After an excellent shot from Scanlan had been tipped over for a corner a scramble ensued in the Westminster's goal, and following a mistake by the goalkeeper the ball was rushed in

by Cantor and Mailer. A brilliant run by the outside left was finished off with a good goal, reducing the score in Guy's favour 4–3. Guy's then showed a glimpse of their first half form, and Evans put across an accurate centre from the touch line which was deflected into the net by the Old Boys' left back. In the very last minute, after repeated efforts, the Old Westminster's scored again, thus leaving Guy's the winners of an excellent game by 5–4.

The Hospital played much better than in previous games, in spite of the absence of Smallshaw and Ashling, and the performance was quite a creditable one. Evans in goal made some really good saves, but the backs and half backs were none too certain against the close passing of the visiting forwards. There is still a tendency to over elaborate dribbling and too much finesse among the forwards, although as a whole there was more method in the attack, which was very effective when swinging the ball about. It was not a good day for Mailer, who had difficulty in bringing the ball under control on the muddy surface when in good scoring positions.

Guy's Team—Evans; Brummitt, Robertson; Blaikley, Stubbs, Ellis; Scanlan, Evans, Mailer, Cantor, Small.

Hockey.

Guy's *v.* Kingston Grammar School.

ON Wednesday, December 7th, we played Kingston Grammar School on their ground and defeated them by 6–1.

During the first half and most of the second play was very even. Archer scored once for us and just after the interval their inside left scored once for them following a misunderstanding between our backs and goalkeeper.

Several times we got away on one or other wing and then the movement was spoilt by delay in centring or poor shooting.

After darkness fell we seemed to fare better and during the last 15 minutes added 5 goals, which were scored by Archer (2), Lyne, Peatfield and Garrus.

Our opponents' outside right deserves mention for although only young he ran well and centred hard at the right time. Fortunately for us he saw very little of the ball.

Guy's Team—G. R. Wootton; F. R. Hayward, E. T. Conybeare; S. W. Wright, C. N. Howitt, T. F. Todd; J. T. Edmonds, H. N. Garrus, C. A. W. Archer, S. R. Peatfield, H. O. Lyne.

Guy's 2nd. *v.* Nestanglo.

WE met and defeated Nestanglo at Elmers End on Saturday, December 10th, by 5–0. Within 10 minutes of the start we were two goals up, Edmonds scoring both—the first following a breakaway by the left wing and the second by a solo effort.

From this point until 10 minutes from the end our forwards would not or could not swing the ball about, and consequently they got no further than our opponents' 25.

During the last 10 minutes we improved and scored three times through Telleke, Stead and Edmonds.

There was a marked improvement in the standard of play yet seen in 2nd XI matches this season, but still the play is haphazard and lacks method; especially is this noticed in the forwards, who appear unable to hit the ball hard. On the whole, the defence was good, especially the backs, who cleared hard, if a little wildly at times.

Guy's Team—E. A. Mayston; H. S. Gare (capt.), F. N. Corfe; J. R. S. Sharp, S. W. Wright, T. F. Todd; J. M. Robertson, C. L. Stevens, J. T. Edmonds, G. R. Stead, R. O. F. Telleke.

THE following Blues and Half Blues have been awarded for season 1926–27:—

Blues—C. A. W. Archer, R. Catchpole, H. O. Lyne.

Half Blues—F. R. Hayward, R. A. Sykes.

Swimming Club.

AT a Committee Meeting, held on November 10th, the following Officers were elected for the season 1928:—

C. E. M. de Gruchy succeeds J. W. H. Jones as Captain and T. L. Kark has resigned the Secretaryship to O. M. H. Jones.

Committee—W. B. Clegg, E. M. Harding, J. W. H. Jones, C. D. Malone and R. W. Stephenson.

O. M. H. JONES,
Hon. Secretary.

Guy's Hospital Gazette.

(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Published on alternate Saturdays. Price **9d.**

Editorial and Publishing Office:—THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

Annual Subscription, including *Directory of Guy's Men (Medical and Dental)*, **12s. 6d.** Post Free, payable in advance.

Hospital Information, etc.

Pass List.

WE wish to express our regret that the last issue of the GAZETTE erroneously contained many names which should not have been included under the Pre-Medical, First and Second Conjoint Examination results. The undermentioned "Pass List" is as it should have read :—

[Conjoint Board.

October, 1927

PRE-MEDICAL EXAMINATION

Chemistry and Physics

†A. D. Taylor — *C. V. Kark
*J. T. Holford — †T. Morgan
†E. V. B. Widdowson

* Chemistry only
† Physics only

FIRST EXAMINATION (NEW REGULATIONS)

PART I

Anatomy and Physiology

J. W. Oliver — †W. V. D. Bolt
*R. O. Payne — *J. S. Lane
*P. Brown — †A. C. Hauptfleisch

* Anatomy only
† Physiology only

SECOND EXAMINATION (OLD REGULATIONS)

PART I

Anatomy and Physiology

*R. W. Stephenson — *W. J. D'Rosario
*N. I. Kronenberg — †J. B. Schofield

* Anatomy only
† Physiology only

PART II (OLD REGULATIONS)

Pharmacology and Materia Medica

N. J. Boulton — R. S. Thomas

Society of Apothecaries.

[November, 1927

Surgery

M. H. Rashwan

Golden Wedding.

HARRIES—Dr. and Mrs. Harries, of Aberystwyth, celebrated their golden wedding on December 5th, 1927. Dr. Harries was born at Llaneast, near Fishguard, and began his medical career at Guy's Hospital in 1867, starting practice at Aberystwyth in 1873. He married Miss Benson, of the Royal Avenue, Chelsea, on December 5th, 1877. Dr. Harries is still hale and hearty. He never wears an overcoat during the coldest winter weather. His prescription for health and longevity is embodied in the phrase: "Eat, drink and be merry." His prescription for enjoying life is "To be kind to everybody and not care a button for anybody." He has enjoyed a wide reputation in his profession. As a sportsman he has maintained the traditions of his family and prides himself on being a Pembroke University man.

Change of Address.

J. Staz, L.D.S., 56, Cuthbert's Buildings, Eloff Street, Johannesburg, South Africa.

F. M. Newnham, 2, Crayford Way, Crayford, Kent. 'Phone: Bexley Heath 471.

J. N. Martin, The Retreat, Sudbury Court Road, Harrow.

E. C. Bevers, 40, St. Giles, Oxford. 'Phone: 2433.

Papers by Guy's Men.

J. Lewin Payne, O.B.E., L.D.S., M.R.C.S.Eng., L.R.C.P. Fractures of the Mandible, *Brit. Dent. Jour.*, xlviii, 1927, p. 1431.

F. D. Gratrix, H.D.D.(Glas.), L.D.S.(Eng.). "The Chloramines," *Brit. Jour. Dent. Sc.*, 1927, November, p. 1.

E. E. Walker, C. S. Gibson, W. Kelsey Fry. Synthetic Resins as Materials for the Construction of Complete Dentures, *Ibid*, 1927, November, p. 28.

Arthur Bulleid, L.R.C.P.(Lond.), M.R.C.S., L.D.S.(Eng.). Asepsis in Root Canal Treatment, *Ibid*, 1927, December, p. 5.

George F. Stebbing, M.B., B.S., and Alex. G. R. Foulerton. Fractures of Metatarsal Bones by Indirect Violence, *Lancet*, 1927, ii, 1225.

Deaths.

MAGGS—On November 29th, 1927, at Riversford, Northam, North Devon, after a few weeks' illness, Alice Maude (née Bristowe), the dearly loved wife of W. A. Maggs.

NORBURN—On December 1st, 1927, following operation, Albert Norburn, M.D., B.S.Lond., of Oldfield Park Lodge, Bath.

HALLIWELL—At the Rowans, Lowther Hill, Forest Hill, S.E.23, Thomas Halliwell, M.R.C.S., L.R.C.P.

Guy's Hospital Gazette

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. The payment that the GAZETTE can offer is merely nominal. Authors who desire reprints of their papers should make their own arrangements with the printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Advertisement Rates on application to "The GAZETTE Manager," Counting House, Guy's Hospital, S.E.1. Telephone: Hop 1086.

EDS. { G. M. H. / E. T. C.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume XLI. *December 31st, 1927.* *Number 1029*

PASSIM

FOR many weeks strong undercurrents of festive preparation had threatened to disturb the smooth stream of hospital routine, but not till Friday did the first eddies make definite appearance on an as yet unbroken surface. Morning saw the Baby Ward, much to the amazement of its wide-eyed youngsters, assume quite suddently its dainty guise, while in the early evening Sister Theatres with her nurses made tea in the surgeon's room and were, we hear, at no loss for company. The calm surface of routine thus ruffled there followed Saturday, with its sudden swirl of activity. Slowly each ward gave up its cherished secrets, while of posters scores in gay array sprang up as if by magic in the Colonnade, and soon, when workers reached their due reward, the snap of tea-time cracker vied with music and laughter in every place. At a later hour the carol singers made their round to usher in Christmas Day, a not unwelcome lull in this strenuous week of merrymaking. The Sunday brought each child the morning thrill of a bulging stocking, to older people the comfort of the preacher with his message, and to all the spirit of goodwill that is the very essence of our festival.

With Monday came the Niggers and their triumphant pilgrimage. A new and non-messiahal hallelujah rang through the wards, roared out with all the current raggernalia. We paused to marvel, not only at the richness of costume, but at the vocal power—if not the vocal pitch—to which they treated us. Theirs is a noble record. Three or four songs in every ward, a multitude of conundral bellowings, and not too tired or too hoarse to look in at the Landon tea, there to outshout 700 lusty children.

The efforts of this gallant troupe were only rendered possible by the sterling services of Messrs. Bonar, Fripp and Shackle, who ran the surgery and both blocks of the hospital during the course of the day, and to them are due the best thanks both of Niggers and their audience.

Tuesday proved a day of concerts, no less than nine being billed, until disaster overtook the Baby Ward in the shape of the sudden appearance of a case of scarlet. There was also a rumour of measles in Lydia, as if the exanthemata grudged our younger inmates their own special joys. Most of the concert audiences moved on at tea time to the informal dance in Out-Patients, that has come to take such an important place in the list of Christmas attractions.

To our regret we write these lines when half the cheery week has yet to go. This number therefore will be sadly wanting in description of events. A special staff of scribes is, however, now at work, and will write again a fortnight hence the full wonders of the present week—at least we hope they will, because they've promised to.

THE local climate of the last few days would give most respectable thermometers a headache. We have suffered a sort of intermittent pyrexia which first gave us a glazed front and severely strained the resources of the Front Surgery, then a spell of almost tropical mugginess, followed on Christmas Monday by snow and all the attendant slushy horrors that it holds for Londoners. Surgery records show that the rain which froze as it reached the ground accoutedn for 130 casualties, of which

about 100 came to fracture Out-Patients the following day. Over 80 per cent. of these had the somewhat seasonable "dinner fork" deformity, but Christmas with a Colles must, we should imagine, be rather wretched.

GUY'S people will read with pleasure the substantial result of the Mayfair Ball, reported elsewhere in this issue. It behoves a profession which does so much for others to look occasionally to its own needs, and we find our own Hospital far from wanting under the test of so deserving an appeal.

WE offer our heartiest congratulations to Mr. R. C. Brock, distinguished in medicine and surgery, to Mr. N. L. Eckhoff, distinguished in surgery, and to Mr. A. B. Hyman, distinguished in pathology, at the recent London M.B., B.S. examination. Four of the nine distinctions were gained by Guy's men, a worthy maintenance of tradition.

WE note that Mr. F. J. Sale has been appointed to the post of Obstetric Resident, to commence duty on January 16th.

WE should like to offer Mr. W. R. Spurrell our best wishes for a speedy recovery from his illness.

MAY good fortune greet our readers in the coming year and may they turn over their new leaves as easily as the pages of our coming volume.

Synthetic Resin as Material for Dentures.

Notes of a Lecture given by Prof. C. S. Gibson, O.B.E., M.Sc., F.I.C.

MR. PRESIDENT AND GENTLEMEN,—I do not know whether in the course of your work you have ever wondered or thought about the essential properties that you wish a denture material to possess. For example, it might have occurred to many of you that there are a great many materials known which would be quite suitable for a denture, and which are not used. A material like porcelain, of course, would be in many ways almost ideal. It would be easily kept clean. There is nothing, as far as we can see, that would prevent its being used in the mouth in contact with the oral tissues. But, of course, as we know, porcelain possesses none of those peculiar properties which we know instinctively a denture must possess—it is too rigid and brittle under strain.

Then, when you come to consider the other materials—for example, the metals. Their use for that purpose is, of course, entirely due to their crystalline nature. The peculiar interlacing and interpenetration of the crystals entirely accounts for their elasticity, and, at the same time, for lack of brittleness. The high elasticity of a metal, by which a metal or alloy can be deformed and then returned to its original condition, is entirely owing to its crystalline nature.

Another material which, of course, is most extensively used is vulcanite. Vulcanite essentially is an organic substance, consisting of carbon, hydrogen and sulphur, and the properties of vulcanite are entirely due to quite a different combination of properties from those which pertain in the metals. In vulcanite you have no crystalline structure at all. It is what we in chemistry call a colloid, and it is the peculiar properties of the solid gel that allow of the use of vulcanite for a denture. Its peculiar properties imply its elasticity. It has the power of returning after deformation for a short time to its original form, and, moreover, it has the power of adapting itself to deformation, and if it is retained in that state it will adhere to it. Hence, the power of adaptation which a vulcanite denture has to the particular form of the mouth.

Apart from its appearance, vulcanite, as you know, in many cases is not a suitable substance to use as the material of a denture base. I dare say many of you may have met in practice cases where vulcanite cannot be used on account of lack of toleration. Further, a vulcanite denture may become extremely foul, in spite of the most careful attention the wearer may give to it.

The discovery of the so-called artificial resins is a very old one, and it is my belief—and, I think, my belief is shared by a great many people—that possibly vulcanite will in a short time be entirely displaced by these artificial resins, and especially by the material to which the name Walkerite has been given. Dr. Walker worked under my direction up to about 15 months ago, and the material has been called after him. These artificial resins have as their essential constituents phenol—which, when pure is a colourless crystalline material—and formaldehyde.

These materials when heated together, under certain prescribed conditions and in the presence of certain catalysts, undergo condensation with

elimination of water. This condensation goes through various stages, producing intermediate crystalline substances, such as salicylic alcohol, which again undergo further condensation with elimination of water. Finally, the limit of condensation is reached and the *plastic* is obtained. After that no water is eliminated on further heating. When the plastic is heated in the absence of water—the conditions that must be attained in making the denture—it first becomes semi-liquid at 50°–60° C.; then, as the temperature is very gradually raised, polymerisation of the substances constituting the plastic takes place with gradual hardening, and, finally, at 110°–120° C., the material is hard, and the result is a synthetic resin. Further hardening takes place if the heating is prolonged or carried still further. In making the denture we stop the heating at about 120° C., so that the resin for a denture is not so completely hardened as is the case when it is used for other purposes. Made as described, the resin is almost colourless and transparent.

In actual practice the plastic is thoroughly mixed with certain small quantities of materials —such as titanium oxide—to give it the necessary translucency, and with small quantities of dyestuffs whereby the colour of the natural gum is simulated in the finished resin. Needless to say, the manufacture of the material is far more difficult than this brief description would indicate.

The material so produced is a colloid, a solid gel, and in that respect is similar to vulcanite. But it is far different in strength, which, while perhaps not so great, is ample for all purposes. It is far different in appearance and is much more easily kept clean, since there is no porosity. It is superficially indistinguishable from the natural gum, and is tolerated readily by the oral tissues. In my opinion, the use of this material constitutes a real advance in prosthetic dentistry, and I am very proud that the work done in the Chemistry Department of this School has been so successful. Any success which the material may have in the future will be due in a great measure to the close co-operation and help which Dr. Walker and I have received from Mr. Kelsey Fry. The investigation has been carried out under the auspices of the Dental Investigation Committee, of which Mr. Kelsey Fry and I are both members. The actual funds were provided by the Dental Board of the United Kingdom.

Notes of a Lecture given by W. Kelsey Fry, Esq., M.C., M.R.C.S., L.D.S.

MR. CHAIRMAN AND GENTLEMEN,—It is a great privilege to me to-night to be able to explain to you the actual practical use of this scientific material, which you have heard about from my colleague, Professor Gibson. I hope to be able to explain to you the actual working of it in words you will be able to understand. First, I must tell you how enthusiastic I am about the material, but, at the same time, judging from the correspondence received on this question, some other members of the profession do not seem to share the same optimistic view of it as I do.

To start with, I have been fortunate enough to have been handling the material for three years. Three years is really a fair test. I want to show you why I am optimistic and keen on this material, and why I do ask you to persevere with it. I will pass round a specimen that has actually been in the mouth for two years, and has not been repolished. Apart from the beautiful appearance of the material, there is something else of great importance to us as dentists, and that is, the fit of the material. Professor Gibson has lent me a well-designed metal model which has been used in the Chemistry Department for measuring the expansion of the plastic, and we took an impression of it in plaster, using a solution of 4 per cent. potassium sulphate and .4 per cent. borax, which prevents expansion. We also cast a model in non-expanding plaster. I will pass this specimen round, and you will see what a beautiful fit you have got with this material on a metal model. Very early in the research with Dr. Walker and Professor Gibson I was asked to construct a case in the Dental Department. I was a little sceptical in regard to the material, and wondered how Dr. Walker would do repairs. I selected a case in which, if the denture had been made in vulcanite, it would have been necessary to insert a suction disc—a sad thing to record—and I was under the impression at the time that this really would be necessary. This case was one of six front teeth on the gum, and, to my surprise, the case fitted so well that the suction disc was entirely unnecessary. The retention in that case was extraordinary and opened my eyes to the good adaptation obtained by the use of this material. Since then I have put in a large number of cases, and the fit obtained with these cases has been a great improvement on that obtained with vulcanite. Dr. Walker explained this improved fit by the fact that in vulcanite cases the vulcanite slightly opens, but that the new material does just the reverse —it closes and fits tightly round the periphery.

That is exactly what is required for retentive purposes, particularly in the upper denture. The denture I am passing round has been worn for two years, and the colour remains good. There is a slight discolouration in the palate, but the friction of the lip has been sufficient to keep the front part a nice pink colour. This material is particularly suitable for uppers. In the case of lowers I would always advocate that a small piece of gold be cast over the ridge in the front to give extra strength.

The first difference in technique between this material and vulcanite is in the waxing up. It is necessary to wax up thoroughly round the teeth, otherwise, when the denture is completed, there will be a yellow discolouration.

There is another difference in the waxing up. In the model which has been passed round you will notice there is an extension of wax at the back of the plate. That extension will collect any air bubbles that may be formed during the process of baking.

The next difference is in the investing of the cast. I would recommend the use of a three-part flask, so that the bottom flask may be removed to allow the plaster to become thoroughly soft and to enable the denture to be cut out without cracking. The cast is inverted in the usual way, on the upside-down method. Then the flask is opened and the wax is washed out in the usual way. After that the case has to be dried. Professor Gibson has already pointed out the importance of thoroughly drying this flask. I quite understand when you wonder, " Is it possible to get a fit when you have absolutely dried your model ? " I was brought up to believe that if I dried my model I should spoil it. But with this material it must be dry—absolutely bone dry.

The flask is put into an electric oven and left there over night, at about 140° C., to dry. It will cost about 4*d.* or 5*d.* for current, but that is a far more satisfactory way of drying than over a Bunsen burner or in a gas oven.

The material is warmed to about 60° or 65° C. If you put this material in the oven at a temperature of about 100° C. it will cause air bubbles to appear. In packing a case cut it up into pieces, just as you would for vulcanite work, and place it upon a piece of starched linen. Then pack it in the flask at a temperature of 65° C., and the material, which is soft, packs in quite easily.

You must overpack, because it is not advisable to open the flask when once closed. The flask is then placed in the oven at a temperature of about 60° or 70° C. When the flask has warmed up, the two halves are first brought together by hand pressure and then transferred to a press for complete closure. There is no possible chance or risk of raising the bite, because the material is so soft.

The flask is closed with a clamp, and you tie a piece of tape round it so as to prevent any of the material coming out during baking. Then you put it in the apparatus, with its excess edge at the top of the flask, so that any air bubbles there may be will come to the surface. There are two types of apparatus—the autoclave and the electric oven. The autoclave has only one advantage over the oven. If the material is a little faulty and contains some air bubbles I think the autoclave pressure probably keeps these air bubbles down, as they do not increase in size. But, provided that you are given material which has no air bubbles in it—which is just the difficulty with the manufacturer—I see no reason why the ordinary electric oven is not equally as good as the autoclave.

The cast is put in the oven, and the important thing is that you heat it up slowly. Time in this work must be no object. The slower you heat it the stronger your material. So we heat this electric oven up to a temperature of 75° C. and let it remain at that for an hour at least. Then you will adjust the screw and put the temperature up to 85°, running up slowly, and leave it there for another hour. Then you will run it up to 95° and leave it for an hour, and then to 113° and leave it at that for 1¼ hours. Those are the temperatures we have found most suitable for the electric oven, and they correspond exactly, as far as we can gather, to the temperatures of the autoclave. One advantage with the oven is that it can be heated up slowly.

When it has been at 113° C. for 1¼ hours the current is turned off and the flask allowed to cool again all night. There should be no hurry in taking it out. In the morning we take off the top of the flask and open it. Here is the advantage of the three-part flask. We are able to let the plaster get quite soft before cutting out the completed case, and so avoiding cracks.

When the case has been lifted out the excess should be fret-sawed off. Do not take a great heavy file and start slicing into it. Fretsaw it off, and then start working with an ordinary vulcanite file. File it and polish it in exactly the same way as with a vulcanite case. The material is a little softer and more freely worked than vulcanite.

I will pass round a case with some air bubbles in it and made of material supplied to us in the early days. That same material was taken and recrushed and repressed to get out the air bubbles, and, having got them out, we made another denture in the oven, a denture which, you will see, is perfect. The finished material should be of a horny nature, and if it has been slowly heated it should be of this texture.

Dentures of this material should not be kept in Milton, as this fluid has a deleterious action upon the Walkerite compound.

Four more Scholarships.

Royal Medical Benevolent Fund Guild Ball.

BRILLIANT both in inception and result. This must be the general summing up in regard to the May Fair Ball held on December 1st in aid of the Education Branch of the Royal Medical Benevolent Fund Guild.

The occasion marked the gracious consent which the Duchess of York gave last July to become the first Royal Patron of the Guild. The Duke and Duchess and Prince and Princess Arthur of Connaught were present, the Duchess receiving in purses and small donations the full sum of £3,000, which the Committee of Ladies set out to raise. Four separate sums of £250 had been subscribed and earmarked for the foundation of four new scholarships—The Iveagh, The Wernher, The Edward Doughty and, a pretty thought, "In Gratitude to our Royal Patron, Anon." The Hospitals which presented purses were: London, £128 3*s.*; St. Thomas's, £126; Guy's, £114 10*s.* 6*d.*; St. Bartholomew's, £105; King's College, £70; Middlesex, £25; University College, £16 11*s.*; Charing Cross, £20 2*s.*

No profession is anxious to advertise the fact that there is distress within its ranks, and perhaps this natural reticence is more marked in our own than any other calling. It is therefore an extremely pleasing reflection upon this one of the very rare occasions when an appeal has been made to the public that the response should have been so ready and wholehearted and effective. From the two-feet long list of donations which Her Royal Highness accepted, one takes the following at random: "Instead of Coming," 12 guineas; "For Kindness Received," 6 guineas; "My Mite," 2*s.* 6*d.*; eloquent testimony of the feeling towards the profession which gives such willing gratuitous service to those who need it.

This kindly feeling was again exemplified by the fact that there was no paid organiser, the whole arrangements from start to finish were without expense—a very important factor when the time comes to reckon up the actual profits. Even the two premier dance bands, presided over by Jack Hylton and Ambrose, gave their services.

In the crowded company were any number of well-known medical men, gaily engaged in conversation with members of that always-ready-to-give profession—the Drama. One noticed at the Duchess's table Dr. Morley Fletcher, Sir John Bradford, President of the College of Physicians, and Lady Bradford, Mr. Percy Sargent and Mrs. Sargent, Dr. and Mrs. Theodore Thompson and Lady Thompson Walker and Sir Alfred and Lady Fripp. Sir Berkeley Moynihan, President of the Royal College of Surgeons, was at another table, and near by were Sir Crisp English, Mr. and Mrs. Victor Bonney and Sir Sidney Alexander. Miss Gladys Cooper, Mr. and Mrs. Harry Welchman sat at the same table as Prince and Princess Arthur of Connaught. Viscountess Curzon was between Mr. Leslie Henson and Mr. Laddie Cliff, with Wing-Commander Greig and Mrs. Greig, Miss Phyllis Monkman, Mr. Stanley Holloway and Miss Ivy Tresmand being among the well-known theatrical stars.

Not only laymen, but some of the more prosperous members of the profession itself, are apt to forget that there is distress in medical circles as in all others. Frequently when a young doctor first "puts up his plate" he is hampered by efforts to pay back loans, which have occurred to cover the unavoidable outlay on his medical curriculum. Should he be overtaken by death or ill health—very often contracted in his endeavours to save some particular case or by research undertaken for the public good—before he has had time to provide for himself or his dependents, they may be overwhelmed by real poverty for want of a little timely help. This is where the Guild is able to step in with grants towards the completion of the education of any children or towards their subsequent training or apprenticeship or maintenance meanwhile.

Last year £3,929 was spent in benefactions, and the Guild provided or assisted with the education of 60 boys and girls.

It is surprising, and rather disappointing, that, in spite of the strenuous endeavours of the Guild, many members of the medical profession plead ignorance of its work. If this appeal should reach their notice, the Secretary, 58, Great Marlborough Street, W.1, will gladly acknowledge subscriptions and furnish any information required.

Sir Douglas Hogg, speaking at a dinner in 1923, the previous occasion on which the Guild made a wide appeal to the public, proposed the founding of Scholarships in memory of great doctors of the past, or even of those—whether doctors or not—to whom it is desired by their friends that a memorial should be raised. His suggestion was that each £250 entrusted to the Guild for this purpose should be invested in such a way that

it yields £30 per annum for 10 years, and that the name given to each Scholarship thus endowed should be perpetuated in the report, not only for those 10 years, but for as long as the Guild lasts. Four such Scholarships resulted from that appeal, and, with the additional four now added to the list of names thus honoured and commemorated among the medical profession, reaches a total of eight. But assuredly it will not stop there, for a more graceful or practical way of expressing gratitude to those they love and respect can scarcely be conceived.

A Cruise to the West Coast of France.

By E. H. Roche.

[*From a Log which was awarded the Deep Sea Challenge Cups for* 1927 *by the Royal Corinthian Yacht Club.*

Concluded.

Monday, August 29th

ON rising at 8 o'clock we found the barometer 30.1 rising and the wind light from the N.W. Conditions could scarcely have been more favourable for a crossing of the Channel, so we decided to get away as soon as possible. Unfortunately we needed many provisions and it was 12.15 before we were ready to set our sails. The wind was very light and we drifted slowly through Fowey on the tide. We laid our course S.×W.$\frac{3}{4}$W. on a point midway between the Stiff Lighthouse on Ushant and Ile Vierge Lighthouse on the mainland. It led about 1$\frac{1}{2}$ miles to the west of the Four Lighthouse. We set the log at 1 p.m. 1 mile S.S.W. of the Gribbin. The wind being aft we set the spinnaker, but half-an-hour later it backed to N.W., so we took in spinnaker and set balloon foresail. The log read 1.2 at 2.30 p.m. and 3.2 at 3.30. The wind then veered to north and we set spinnaker once more and carried it till 9 p.m., when we took it in to save trouble during the night watches. At 6 p.m. we got our last fixation of position from the Dodman, St. Anthony and the Lizard, and found that we were 14 miles S.S.W. of the Gribbin. The log then read 9.5 and we rather suspected that it was under-registering, but could not be sure, as it was difficult to estimate the strength of the tide.

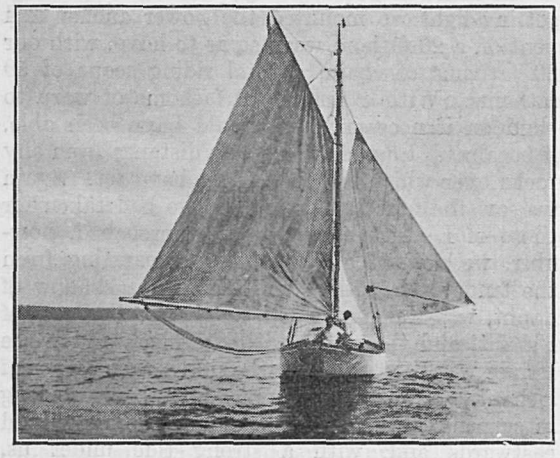
The wind freshened and sent us along well, but it shifted about between N.N.E. and N.N.W. and made us gybe several times. The night was fine and clear, but there was no moon at all and the stars shone like beacons in a Stygian sky. The northerly swell stole quietly by and, as we sped gaily along, the silence of the night lent strange enchantment to the music of our motion—the purring of the rigging, the surge of the bow wave and the song of a myriad bursting bubbles in our wake. We plotted position at every slack water of the Channel tide. At 3.30 a.m. we logged 44.7 miles and at 10 a.m. on Tuesday 70.5. We again set spinnaker and continued to travel exceedingly well. There was a haze upon the water and it was difficult to know how far it was possible to see. At 2.45 p.m. the haze cleared slightly and disclosed a high cliff straight ahead, and on it the outlines of a very large tower were dimly visible. We could not make out any details of the tower, but, judging by its enormous size, I thought it was probably Ile Vierge, and that we were about 2 miles from it. So, without venturing any closer, we gybed at once and sheered off to W.$\frac{1}{2}$S. to clear the Porsal Rocks. A steamer crossed our bows heading N.E. and, calculating roughly from her speed, the angle at which she crossed our bows, and the time at which we first sighted her, we estimated that visibility was limited to 3 miles.

There was much broken water on the port beam, and this we attributed to the tide ripping over the Porsal Rocks, but we saw nothing further of the land. When about two hours had passed without sighting anything, even though the visibility had slightly improved, we headed W.S.W., then S.W. and, finally, S. At 6.45 p.m. we again sighted a tall tower on a high cliff, and it was then possible to discern, to the south-west of it, four small towers, which we took to be the beacons leading into L'Abervrach. Nowhere else on the cost did the chart show four beacons so close together, and we therefore had little doubt that the tower before us was Ile Vierge. We assumed moreover that it was the same tower as the one we had first sighted, the strong east-going tide having swept us back to it. The fact that it was adorned with five black and white horizontal bands, which were not described on the chart, was no doubt due to a trivial omission on the part

of the hydrographer. When it began to flash our suspicions were slightly aroused, for although Ile Vierge should flash regularly every 5 seconds this light was flashing at unequal intervals in a way that would be described in English waters as a group of 2 every 10 seconds. But we did not know how far the accuracy of French lights could be relied upon, and the L'Abervrach beacons appeared to establish its identity. So we again sheered off to the west and again lost the land, and hunted in vain for the Porsal Tower. When an hour's sailing had disclosed no evidence of land ahead we altered course to S.W. and then to S. Presently we picked up a light, group-flashing 3 every 15 seconds which would have done for the Porsal, but the light was distinctly red, which the Porsal was not, and we also noticed that it seemed much closer to Ile Vierge than the Porsal should have been. Looking again at the chart our attention was directed to the western extremity of Ushant Island, where there appeared to be a light—the Creach—group-flashing twice every 10 seconds, and a few miles S.S.W. of it La Jument, group-flashing red 3 times every 15 seconds. These lights, both in nature and in their relative positions, agreed with those we had been observing far more closely than did Ile Vierge and the Porsal, but, at the same time, if we were indeed to the north of Ushant how could we explain away the L'Abervrach beacons? The chart showed only one beacon on the south-west corner of Ushant, and this bore S.S.E. from the Creach Lighthouse, and did not at all correspond with those we had seen. While we were still contemplating the problem a dense fog came down and blotted out both lights. Being still uncertain as to our position we decided to await the return of reasonable visibility before making any further attempt to close with the land on that untidy and unforgiving coast. So we turned round and, heading N.×E. for the open sea, ran out for 10 miles by the log and hove to for the night. It was perhaps unnecessary to run out so far, but we wanted to be quite sure that we were clear of the tide sweeping S.W. across the rocks which stretch in an almost unbroken chain from Ushant to St. Matthiew. The wind was very light and the sea calm. The fog remained very thick all night and did not begin to clear till the following afternoon. A few steamers crept slowly past and we had our fog bell ready, but did not have any real occasion to use it. We had been eating heartily ever since leaving Fowey, and our supply of bread and biscuits was becoming alarmingly depleted, and as we did not know when we should make port we were compelled to institute a system of rationing. That came as a severe blow to our ravenous appetites. We, fortunately, had an abundance of potatoes, and great ingenuity was practised in the cooking of that rather stodgy vegetable. Wood's salmon fritters were perhaps the most oustanding success and allayed very effectively the pangs of hunger. We could not, however, compete with the extraordinary craving for chocolate éclairs, with which Palmer at that stage became obsessed, and which even our combined culinary masterpieces were quite unable to appease.

At about 3.30 p.m. the fog lifted sufficiently to allow about three miles' visibility, so we got under way with a light breeze from the north-west and made another bid for the Four Channel. We set course S.S.E. Log 129.5. Set spinnaker. At about 6 o'clock we again sighted the same cliff and the same tower with the black and white horizontal stripes. We had therefore learned nothing as to our position in the last 24 hours, and darkness was again descending upon us. However, we had realised by that time that whatever tower it was we might safely approach it from the north to a distance of one mile. So as it was then bearing south we headed straight for it in the hope of gleaning some definite information that would lead us to identify it absolutely. As the wind was getting light we mounted the bower anchor and bent on a 20 fathom warp so as to have, with our 30 fathoms of chain, a total riding scope of 50 fathoms. With a further 30 fathoms of warp to bend on if necessary we should have been able, if becalmed, to anchor at a safe distance from any rocks over which the tide might have set. Again we saw the four beacons which we had taken for those of L'Abervrach. As we approached, however, we noticed a small island separating from the land to the east. This, without a shadow of doubt, was Keleren Island, on the North Coast of Ushant, and the tower with the black and white stripes was the Creach on the north-west corner of Ushant. It was a great relief after being so long in suspense to know our position. So we turned eastwards and, with a strong tide under us, quickly passed Keleren and picked up the Stiff Lighthouse on the north-east corner of Ushant. This was undoubtedly the tower and the cliff of our original landfall. If only the haze had cleared sufficiently on the previous afternoon to show that there was no land to the east of that cliff we should have been able to run straight through to Brest and to save ourselves 24 hours of groping in the fog. We have not yet explained the four towers to the south-west of the Creach, which do not appear to be shown on any chart. Possibly one was La Jument. Incidentally, we found that the Stiff Light was a red one, flashing twice every 10 seconds instead of an alternate red and white flashing once a minute as shown on the chart.

We steered E.×S. to get as far to the west as possible before the ebb tide set in. The wind fell very light, and we therefore carried the spinnaker even though it was very dark and our starboard navigation light was obscured. At 8.30 p.m. the tide set to the S.S.W. across the chain of rocks formed by the Banner, Molène and Beniguet groups. Not knowing how strongly the tide would run we took the precaution of fixing position every 20 minutes from the Creach and Stiff and, later, from the Stiff and Kerèon lights. The Four Tower on the port bow and Kermorvan and St. Matthiew on the starboard beam were soon picked up, but the fixed green light of Les Platresses was not visible for more than 2½ miles. We thus slowly made our way across into the Four Channel. It was at about this time that we discovered with dismay that our log was missing. It must have been caught by the mainsheet and flicked overboard. Thenceforth guesswork must enter largely into our navigation. When Les Platresses was open to the west of St. Matthiew we took in spinnaker, set balloon foresail and headed S.×E.½E. down the Four Channel, allowing one point to counteract the outward set of the tide.



Albatross before the wind approaching Toulinquet Point.

Passing Les Platresses to starboard at 11 p.m. we continued down the Four Channel, remaining in the fixed white beam of St. Matthiew, but keeping it slightly open to the west of Kermorvan to clear Le Tendoc and St. Paul buoys, which we could not have seen in the pitch darkness. A very light air fanned us along at about 1½ knots. The sea was perfectly calm. At about midnight we entered the white sector of the Corsen Light, but it was so feeble as to be scarcely visible and its colours were almost impossible to distinguish. We then headed S.W.½S. again allowing one point for the outward set of the tide. When about half-a-mile from the Grande Vinotière the wind deserted entirely and as there remained only half-an-hour of the ebb tide, we took to the sweeps in the hope of making St. Matthiew at slack water, when we should have been able to carry the flood tide to Brest. But in spite of the most strenuous effort we had scarcely reached the Grande Vinotière when the tide turned against us. So we gave it up and swept into the Anse des Blancs Sablons, N.E. of Kermorvan, and came to anchor in 6 fathoms. We finally turned in at 2.30 a.m. and enjoyed what remained of the night on an even keel.

Thursday, September 1st

We turned out at 11 a.m. to find a light to moderate wind from the south-west. The fog had vanished and the clear morning showed us a beautiful array of scattered islands and rocks stretching across to Ushant, some 12 miles to the north-west. With chiselled edges of the hardest stone running down to the water and little beaches of the whitest sand wedged here and there into the crevices they presented a very fine spectacle and shone like jewels in the bright sun. Getting our anchor at 12.15 p.m. we set out with every hope of rounding St. Matthiew by slack water, for we had 1½ hours in hand and only 3 miles to go. Alas, however, we were scarcely under way before the wind went round to the south, heading us off completely, and very soon after that it fell away almost to nothing. So we again took to the sweeps and worked with might and main and got within a quarter-of-a-mile of the point at slack water; but again we were defeated by the tide, which at that end of the Four Channel runs at 4½ knots. Not until we began actually to lose ground did we abandon the sweeps and then, partly drifting and partly sailing, made our way down to Le Conquet, where we came to anchor in 4 fathoms, opposite the middle of the beach. It was about a mile south of the previous night's anchorage.

Spurred by the awful prospect of an empty larder we hastened ashore with much hope but no French money. The winding path up the cliff brought us into the back yard of the Hotel de la Pointe St. Barbe, a large square building overlooking the beach. Although its appearance from the sea was not prepossessing, we decided to test our fortunes there before proceeding further into the village, and seldom have we fallen more happily on our feet. For the proprietor and proprietress both spoke fluent English and received us with the utmost hospitality. They gave us water, changed our money and put on a full dress dinner for our special benefit in the middle of the afternoon. Nothing was too much trouble for them to do and enjoy doing, and all because they thought we were

"good sail-ors." Not the meal only, but the whole atmosphere of that house left a pleasant taste in our mouths which lingered for many days and sent us on our way rejoicing in the goodness of human nature. Few experiences of the whole cruise are more pleasant to look back upon.

Friday, September 2nd

This was a beautifully fine day. The barometer was 30.35 rising and the wind very light, shifting between north and south-west. We got under way at 11 o'clock determined to round St. Matthiew before slack water, and this time—our third attempt on three successive days—we succeeded. Taking the inside passage between Les Vieux Moines and St. Matthiew we followed the coast along to the east at a distance of about a quarter-of-a-mile, passing inside Le Coq and Le Beusec. We always take inside passages where possible as they are usually so much more interesting. On our starboard hand we were thrilled by Les Tas de Pois and the other tall grey pinnacles of rock running out into the sea for a distance of several miles from the Toulinquet Peninsula. The wind was very light and at times absent, but with spinnaker set and the tide under us we crept up through the Goulet and made the western entrance of Brest Harbour at 4.30 p.m. Passing the French Navy we made a gallant attempt to salute, but the ensign halyards jammed. Later on, however, we made amends by passing the same cruiser and giving a masterly salute. We finally anchored at 5 o'clock among the yachts at the eastern end of the Basin de Commerce. We dined ashore. Returning late to the boat we took the wrong turning in the darkness and passing down some steps on to what we took to be the lower road we were astonished when a sentry stood to attention and saluted. We soon realised that we were in the Basin Naval. Thinking we could make an exit with the same brazen assurance we wandered hopefully along, but found no sign of an opening in the vertical wall of stone which surrounded us. Presently a sentry sprang out of the darkness and, brandishing a terrible gleaming weapon, brought us to a sudden halt. At first the dialogue was distinctly strained, but Palmer's "Nous somme perdus" acted like a charm and relieved the tension. The sentry directed us back the way we had come and we parted with moderately cordial "bon soirs"—somewhat shaken and profoundly thankful to have escaped his bayonet.

Saturday, September 3rd

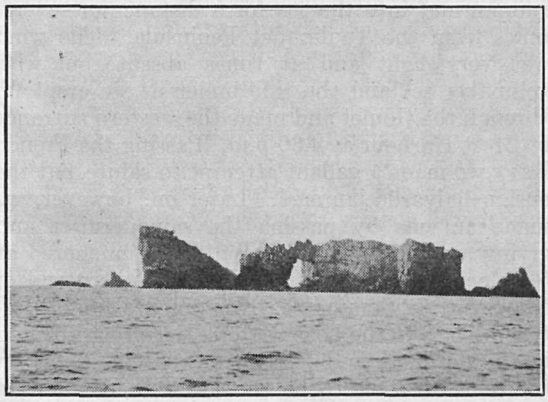
The morning was spent ashore, where we changed as much money as we thought we should require for the rest of the cruise and laid in a good stock of provisions. At 12.30 p.m. we got under way for Douarnenez, with three hours of ebb tide to help us through the Goulet. The wind was very light from the north-east and in spite of the spinnaker our progress was so slow that we had barely emerged from the Goulet when the flood tide began to make. The wind being so light and Douarnenez so far out of our way we altered our plans and decided to make for the Anse de Pen-hir, which would be well sheltered in north-easterly weather and would be a good jumping off place for a passage through the Raz de Sein. On reaching Toulinquet Pt. at 4 p.m. we took in the spinnaker and, setting balloon foresail, sailed S.×W. down the Toulinquet Channel. The wind began to freshen and we made good way against the tide. We passed inside the outer rock of Les Tas de Pois and were heading for the Anse de Pen-hir when the wind freshened further and caused us to alter our plans once more. We had a fair wind for the Raz and a good chance of making it by slack water, so we decided to make a 24-hour passage and get as far down the Bay as we could and then to spend the remainder of our time making short treks homeward. A mist had come up, limiting visibility to about 4 miles, but with a freshening wind we thought it probably would not get any thicker. So we set spinnaker and laid a course S.W. for the Raz, allowing three-quarters of a point to counteract the indraught into Douarnenez Bay. It was a 13 mile run to the Saints and we made good way against the tide. The fog thickened slightly, but visibility was at no time less than 3 miles. At 7.5 p.m. we picked up St. They Point on the port bow. Soon after that La Vielle tumbled out of the mist ahead and at 8 p.m., a quarter-of-an-hour before slack water, we passed comfortably through the Raz. Taking in spinnaker and setting balloon foresail we laid course S.E.×S.$\frac{1}{2}$S. to clear the Penmarch Rocks. At 9 p.m. we hove to for dinner. It was a pleasant night, but a light mist still hung upon the water and visibility was not very good. At 1.15 a.m. we sighted Penmarch Light well on the port bow, and at 4 a.m. it bore N.E. We did not see the occulting Menhir Light, although we searched for it with great diligence. We then set course S.E.$\frac{1}{2}$S. to give a wide berth to the scattered and inadequately lighted rocks of the Glenan group. Navigating a long passage without log or sextant necessarily involves a good deal of guesswork. Thus, at 10.30 a.m., we judged that we were abreast of the Glenans, and altered course to S.E.×E.$\frac{1}{4}$E. on La Teigneuse Passage, which would take us between Belle Ile and the Quiberon Peninsula. During the night the wind, which was now very light, had gone round to the north-west, so we set the spinnaker, which fortunately we were able to carry all day. The sky remained perfectly clear and the sea calm and of the deepest blue. The barometer was steady at

30.4. A very slow Atlantic swell was rolling in from the west, but the crests of the waves must have been nearly a quarter-of-a-mile apart. Perhaps there were alternate periods of slight acceleration and retardation of our speed as we happened to be on the downward and then upon the upward slope of the roller, but beyond that we were scarcely conscious of its existence. Here and there tunny leapt and capered, and their further activities were indicated by the jets of sardines which every now and then were projected into the air. Throughout the day our speed varied from 1 to 2½ knots. We knew that we must eventually strike land somewhere, but at no time had we the least idea how far we were from it. During the afternoon a light haze settled over the water, and after that it would be idle to guess how many phantom Belle Iles appeared on the starboard bow or how many chimeric forms on the port beam were taken for the Ile de Groix. No land appeared, however, and it was not till 9 p.m. that we picked up the Goulphar Light on the south-west corner of Belle Ile, bearing S.E. Soon after that Les Poulains appeared, bearing E.×S. Altering course to east we made our way slowly along, passing Les Poulaines on the north-west corner of Belle Ile at about 3 a.m. Leaving the fixed white light of Sanzon to starboard, we presently picked up Le Palais, bearing south, and thought we should probably make the harbour in about an hour. We decided to sail S.E.×E. till Le Palais bore S.S.W., so as to clear the shallows off Pte. de Taillefer, but were much perplexed when Le Palais continued to bear exactly south. Evidently a strong tide was holding us. It was then about 4.30 a.m., so that while the lights were still shining brightly the land was also becoming discernible, and it was in that uncertain light that we saw almost straight ahead a stone tower, which we seemed to be approaching with alarming speed. Suddenly it dawned upon us that the light we had taken for Le Palais itself was in reality the light of a steamer, and that the steamer, having left Le Palais, was then making north-east for La Teignouse Passage. The tower was obviously on one of the rocks which run in an almost unbroken chain from the Quiberon Peninsula to the Cardinals, and on to these rocks the flood tide was swiftly bearing us down. The wind was too light to stem a tide of that strength so, without wasting a moment, I rushed forward and let go the anchor. The stone tower continued to approach with alarming speed, and a few minutes later it took the shape of a fishing boat. I have seldom felt quite so foolish. Later on, when the breeze freshened a little, we ran down to Le Palais and brought up very comfortably in the outer harbour, riding bow to anchor and stern to a mooring chain on the wall. Le Palais was a very pretty little town, and we agreed that Belle Ile richly deserved its name. I, in particular, derived double pleasure from its beauty, for my crew invariably gave me the whole credit for the merit of any really attractive place into which we found our way, but were prone to greet with ominous silence some of the less pleasant harbours into which I occasionally led them.

Tuesday, September 6th

It rained heavily during the night, but the morning was fine. The barometer had fallen considerably to 29.86, and the wind was fresh but steady from the west.

Much as we should have liked to go round the Cardinals or through La Teignouse Passage and explore Quiberon Bay and the Vilaine River, we realised that our time was nearly spent, for Wood was due in London a week hence and Palmer and I had to be back by the 15th. So we decided to begin our homeward journey by making a passage



Toulinquet Rock.

to Port Louis, some 25 miles N.×W., and as we wanted to arrive there at about 5.30 p.m. to carry the flood tide into the Blavet River, we left Le Palais with much regret at 11.30 a.m. In passing we saw just enough of the fine cliffs of Presq'ile de Quiberon to excite our admiration, and just enough of Houat, Haedik and other rocks to command the profoundest respect, and we took our hats off to Lord Hawke who, in 1759, swept down from the west and entering Quiberon Bay engaged and defeated the French Fleet in an onshore gale.

We carried a fine strong breeze on the beam and very soon covered the distance to Ile de Groix, which we left to port. In the passage across we saw a great number of single and double-lugged fishing boats, some making for Le Palais, others for Port Louis and Etel, and there were also two or three large tunnymen making seawards. From the largest to the smallest they followed the

design which appears to be almost universal on this part of the French coast. The stem is almost vertical right down to the keel, and the bows are fairly bluff. The widest beam is well forward at about the level of the mast, and from that point the hull lines sweep gradually upwards and inwards towards the stern. From the water-line upwards the stern is composed of a transom raked to an angle of about 40° with the water, so that there is scarcely any break in the lines of the hull where the transom joins it. The resemblance to the shape of a fish is obvious. They were all exceedingly well made, the curves of the hull below the waterline being as carefully moulded as those of a yacht. Their performance in a heavy sea is remarkable, as we had occasion to witness a few days later, and even with their clumsy lug sails they can show a fine turn of speed. A yacht modelled on the lines of those fishing boats would be seaworthy, comfortable and fast.

We passed over the edge of the Plateaux des Brivideaux and the seas there were steep enough to suggest the possibility of dangerous breakers in a gale.

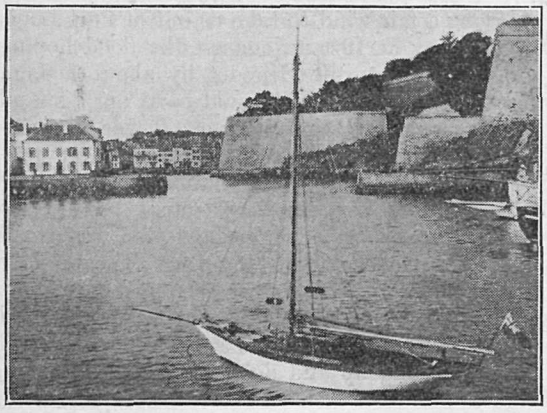
Off the Ile de Groix we fixed position from two prominent lighthouses and laid a course north to clear Les Errants Rocks and lead us into the West Channel, which is the widest and best entrance to the Blavet River. We cruised about for some time looking for the red tower which was supposed to mark the western extremity of Les Errants, but failed to find it. Eventually we followed a steamer in and discovered that the tower was missing, its place being taken by a red buoy some 50 yards further to the west. There had obviously been considerable dredging since the last charts were printed. Passing Larmor to port we rounded the breakwater of Port Louis and, running in fairly close to the town where the charts indicated no water at all, we anchored in 5 fathoms. It was moderately well sheltered and there was no tide. Going ashore we took the wrong turning at the Quay and wandered a long way in search of a restaurant and had almost given it up as hopeless when we stumbled upon the Hotel de la Plage, where we were quite well catered for. If, on landing at the Quay, we had turned to the right instead of to the left we should have found it almost at once and saved ourselves a long and dismal tramp through narrow streets among small and crowded habitations.

Wednesday, September 7th

We selected Benodet some 35 miles N.W.×W. as our destination for the day. The wind was N.×W. light, and though it would serve well for making our exit from the Blavet River it was foul for the passage along the coast. The tidal streams on that part of the West Coast of France are very different from those of the North Sea and English Channel, and it was hard to know how best to make them serve. For whereas in the latter case the tides consist mainly of a to-and-fro movement, the whole of the flood tending to make in one direction and the whole of the ebb in the opposite direction, no such simple rule holds for the former. In fact, from the Saints to the Loire the tides perform a peculiar gyratory movement, turning slowly clockwise through all the points of the compass and completing one cycle in every tide. Thus, as a general rule, at low water it makes west, one hour later it makes north-west, and in successive hours it turns through north, nor' nor' east, north-east, east, south-east, until at high water it is sou'-sou'-east. Then, during the ebb, it turns gradually on through south and south-west to west. Probably on this part of the coast the tides running in and out of the harbours are stronger and more seriously to be reckoned with than are the vacillating streams in the offing. Penmarch Point would perhaps be an exception to this rule.

Having a fair wind to take us out of Port Louis we got away at 10 a.m. against the flood hoping to reach the Anse de Benodet by about 7 p.m., where the next flood tide would be at our disposal to carry us up the Quimper River. It was a beautiful day, but the wind was very light and our progress against it was slow. Sailing close to Port Tudy we were very agreably impressed by the town and harbour, though the latter was small and tightly packed with fishing boats. The westerly blow of the previous day was sending in a short swell which held us up on the starboard tack, and we were obliged to let her off considerably to avoid merely bobbing up and down. Passing Douelan, Brigneau, and the Belon River we were still some 5 miles east of Penfret Island at 9.30 p.m. and our chances of making Benodet during the remaining three hours of the flood tide were very slender. In fact, without a drastic change of wind, they were absolutely nil. So we held on till we were about $1\frac{1}{2}$ miles north-east of Penfret, and then decided to run in to Concarneau or bring up in Forest Bay under the lee of Beg Neil. No sooner had this course been settled than the breeze began to freshen a little from the west, and we thought it might be worth while to sail on through the night and, passing Benodet and Penmarch, to make straight for Audierne. The crew, as always, were game and eager to press on. To have passed outside the Glenan Islands would have entailed a very long detour, and we therefore decided to pass between the Ile aux Moutons and the Pourceau Rocks. It meant beating in the pitch dark in a narrow passage, bounded on the port hand by

rocks which were unlighted and mostly submerged, but the coloured sectors of the Ile Aux Moutons Light covering the rocks on the starboard hand were exceedingly bright and clear, and we thought that by making sufficiently short tacks the passage could be navigated with safety. Not only did the Ile Aux Moutons Light throw a magnificent beam in a horizontal direction across the water, but it also cast a certain amount of light downwards, illuminating like a lantern the rocks around its base for a radius of some hundreds of yards. In that glow we were able to make out a large rock about 400 yards east of the light. This landmark enabled us to judge our distance from the Ile aux Moutons and provided the key to the entrance of the passage. Once past the island navigation became simpler. We kept mainly in the south-western white sector, straying at first for a short distance into the red sector to port, but never trespassing a single yard further than we could help into the green sector, which marked the absolute limit of safe water to starboard. Eventually we entered



Le Palais. Belle Ile.

the red sector of Loctudy and knew that we were clear of the rocks on the starboard hand. We then abandoned the first whitesector of Ile aux Moutons, and, entering its green and second white sectors, kept within these limits until, passing through the red sector of Loctudy, we entered the first white sector of Guilvinec. We were then clear of the Glenan Islands, and with unlimited sea room to port could easily avoid the Penmarch Rocks. Shortly after that the wind quickly backed through S.W. to S.S.W. and began to freshen considerably and we were able to lay a course parallel to the coast, skirting the rocks at a distance of about a mile.

Dawn gave a brilliant and awe-inspiring display of crimson extending over nearly half the horizon. It was exceedingly beautiful, but we remembered the well-known "sailor's warning." The wind continued to freshen and at 6.30 a.m. we rounded Penmarch at great speed. Then quite suddenly a thick fog came up and we ran into what I had never experienced before—a combination of thick fog and strong wind. Taking quick bearings to Penmarch Lighthouse and Church we fixed position and laid course N.$\frac{1}{2}$W. on Audierne, some 15 miles away. The fog got gradually thicker as the wind became stronger and we made great speed across Audierne Bay. After two hours the wind had increased almost to a full gale and the seas were becoming so ferocious that it was no longer prudent to run before them at such great speed. So we hove to, changed to storm jib and treble reefed the mainsail and, before getting under way again, Wood got into the dinghy and bailed her dry. The foresail had previously been taken in. At that juncture a fisherman from Audierne passed close by and bade us follow. It was exceedingly sporting of him to interest himself in our welfare and we were very glad of his local knowledge, for the channel across the bar and within the harbour is narrow and by no means straight. We met several other fishing boats running for harbour under very short canvas. Their movements in the water were beautifully easy. Passing the town we came to anchor just below the bridge and took a stern rope to a large buoy, around which were clustered a number of dinghies and other small craft. We were thrilled by the clear water and the pearly white bottom of hard sand. The harbour affords excellent shelter in all weathers. The outer bar can be crossed close to the breakwater at all states of tide and in all weathers except prolonged southerly gales, but the inner bar, opposite the middle of the town, carries only 2 feet at low water ordinary springs. Vessels of almost any draught could lie in sheltered water between the two bars, preferably at the point where the harbour bends sharply to port. Audierne is an excellent refuge situated midway between Benodet and Brest. The town itself is not particularly attractive.

Friday, September 9th

The previous day's disturbance had entirely passed, and the wind was light from N.N.W.—foul for the Raz de Sein, which lay 9 miles N.W.×W. The Raz is the only passage on the West Coast of France which must be taken by small boats at slack water, for the springs run at 7 knots and even a moderate wind against the tide throws up a steep and dangerous sea. Periods of slack water lasting from an hour to an hour-and-a-half begin about 1$\frac{3}{4}$ hours before local high and low water, and it is convenient to remember that high water along the coast all the way from Brest to the Loire occurs at approximately 4$\frac{3}{4}$ hours

after high water Dover. Thus, at the Raz there would on that day have been a period of slack water from 1.30 to 2.30 p.m., and again from 7 to 8.30 p.m.

Unfortunately, we were above the inner bar and could not get across it before half-tide. When we eventually got under way at noon the wind was so light that we had to sweep part of the way out and when we were clear of the harbour it fell away altogether and left us becalmed for some hours. At about 5 p.m. a light breeze sprang up from W.S.W. which allowed us to lay a course parallel to the coast, but it brought in its train a fog which became progressively thicker. At times visibility was limited to a few hundred yards. By 7 p.m. there was no sign of the fog clearing and we were getting uncomfortably near the Raz. Presently visibility improved slightly and we bore away to the north to pick up land and find our exact position. Then, creeping along with the cliff just visible to starboard at a distance of rather less than half-a-mile, we presently came to the Point du Raz—a very characteristic headland. It being then slack water we steered W.N.W. till we found La Plate and La Vieille and made our way safely into the Channel. We passed La Vieille in fairly calm water at 8.45 p.m. just as the first of the flood tide was beginning to make. We then set a course N.×E. on La Parquette, allowing one point for indraught into Douarnenez Bay. Passing La Parquette to starboard we made a fine passage on the wings of a strong following wind up through the Goulet de Brest and arrived at the Basin de Commerce at 2.30 a.m.

Saturday we spent resting and making preparations for the passage to England. No doubt there is a West End to Brest, but in the short time we spent there we found only a very extensive East End. With a view to an early start on the following day we decided to return early on board in order to ensure a good night's sleep. So we made our way back to the Quay at about 9 p.m., but were much annoyed on arriving there to find that our dinghy was no longer where we had left it. With increasing consternation we searched every pier, hard and jetty in the whole of Brest and eventually after more than two hours' hunting we discovered the dinghy tied up to one of the French yachts at anchor in the middle of the harbour. We had previously spoken to the paid hand belonging to that boat. He seemed quite a decent man and had been to regattas at Cowes, and I believe he took our dinghy with the best intentions in the world, thinking it would be safer out of reach of the quay. We did not see the man again, and probably he has no idea that his cras stupidity caused us any inconvenience. We were a tired crew when finally we made our way back to *Albatross* at about midnight.

Sunday, September 11th

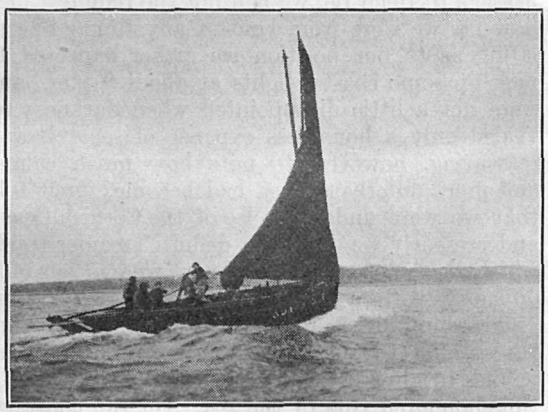
Turning out at 6.30 a.m. we found a fresh breeze from the north-west which was by no means an unfavourable quarter for the Channel passage. It was essential to carry a favourable tide through the Goulet and through the Four Channel, where the springs rip through in the narrowest parts at about 7 knots. We wanted therefore to make St. Matthiew Point, some 12 miles to the west, at about 11 a.m., when there would be a whole 8 hours of flood tide to carry us through the Four Channel. Thinking that for the first two or three hours we should have sheltered water in which it would be possible to cut sandwiches and cook our usual supply of food for the night watches we got under way immediately after breakfast and waved farewell to Brest at 8 a.m. We little dreamt that we were setting out upon the most trying passage that *Albatross* had ever made. We had our first buffeting in the Goulet de Brest. In our previous three passages through the Goulet that narrow stretch of water had always been as calm as a mill pond, but on that day a moderate wind driving slightly against the spring tide, was throwing up quite an ugly bauble in mid-Channel, and, unsuspecting, we allowed ourselves to be carried right into the middle of it. Close to either shore there was a fairly wide strip of calm water. We dared not allow her to sail, but just staggered her into the wind until the tide had swept us clear of the broken water. The wind was freshening a good deal and a few miles east of St. Matthiew we ran close up to the weather shore, where we hove to, changed to the small jib and double-reefed the mainsail. We arrived at St. Matthiew at about 11 o'clock according to plan, but, alas, no food had been prepared for the night. The Four Channel looked fairly calm and we thought our troubles were over. It was just slack water. But no sooner had we altered course to round St. Matthiew than the wind veered suddenly to the north, which quarter was foul not only for the Four Channel, but also for Falmouth. Moreover, the wind was now diametrically opposed to the flood tide and very soon a steep and boisterous sea was running, and this increased every minute as the tide gained strength. We had to beat every inch of the way. We quickly battened down the cockpit. Passing the Grande Vinotière in a shower of spray we took full advantage of the calmer water in the Anse des Blancs Sablons and Anse de Portzmoguer, but beyond Corsen we thought it safer to face the music in the deep water. We shaved past Les Platresses and saw the white crested waves breaking heavily on the shallows. The wind was definitely and steadily increasing, and we changed to spitfire jib and reefed the foresail. A fishing boat that had been keeping us company ran over to L'Aberildut on the starboard

If We Could Advertise

I.—THE SURGEON

"I certainly think, Lady Waddle, that you should have your appendix removed by my new 'Vermiform' operation, for which I received the silver challenge cup at the last Smithfield Show; it is the same operation as I performed on H.M. The King of Nomadria. The fee is one hundred guineas cash, or £140 by our instalment system. Sixty guineas before the anæsthetic, ten guineas on 'coming round,' and the remainder when you are entirely convalescent and able to leave my nursing home. The nursing home charges are a little bit extra; a mere trifle I assure you. Details of the operation are fully described on my posters displayed on the Underground railways."

beam and came to anchor. We discussed the advisability of following her example, but the barometer was perfectly steady and, thinking we were through the worst of the sea we decided to hold on and look for shelter on the weather side of the English Channel. Actually, however, we were not by any means through the worst of the sea, and I think if we had known all that was in store we should probably have followed meekly in the wake of that shrewd fisherman. Two or three miles north-west of the Four Tower the tide from the Four Channel meets the main channel tide nearly at right angles and through that confused and terrible bauble we had to pick our way. The wind was by that time almost at gale strength, and the sea was very perplexing and difficult to ride to. One could distinguish a considerable swell rolling in from the north-west, with steep surfaces and white curling crests, and superimposed on that and running at about 45° to it was a short chop set up by the northerly blow. But quite apart from these, and more formidable because less intelligible, were the great



Our Pilot. Audierne.

mountains of water which reared up suddenly without rhyme or reason, toppled and fell aimlessly about like drunken monsters of the deep. Sometimes we plunged into a vertical wall of water and were buried to the mast in a green deluge. At other times our bows, flung high into the air by a wave, would descend suddenly into the chasm on the other side and thrash the oncoming wave with the bowsprit with such terrific force that the spar creaked and the bobstay stretched under the strain. Here and there columns of water appeared to bend and break in the middle, and the top half, tumbling madly down the surface of the lower half, enveloped us in a torrent of foam. Here and there curling crests were torn from the waves by the wind and, hurtling through the air, smothered us in drenching jets of spin-drift. To have presented a retreating counter to those ravening seas would have been to court disaster. There could be no question of turning back. For the most part we rode to the biggest waves at an angle of about 40°, keeping the boat as still as was consistent with steerage way. We were thankful to have only a storm jib riding high above the bowsprit, but were glad of a high peak to the mainsail, without which we should have lost control in the deepest troughs. *Albatross* behaved splendidly through it all, and we had never been more proud of our little craft. How the dinghy survived the ordeal was a miracle. Without its canvas cover it could not have lasted 10 minutes, for deluge after deluge descended upon it, and on one occasion when our stern was flung swiftly forward I saw it dragged right through a wave with several feet of green water above it. Gradually the tide carried us through the bauble into a more orderly sea, and we let her go forward a little more freely. We had all been drenched to the skin twice over, and finding the northerly wind very cold we discussed putting in to L'Abervrach for the night. The upper reaches of the harbour would have given moderate shelter, but in a northerly gale it would not have been safe to enter till the beginning of the flood tide at 11 p.m., when it would have been difficult in the darkness to find the beacons which mark the way in. So the crew being game and the barometer steady the decision was made to go on.

Yo, ho, ho, away we go,
  Aslant the rolling waves ;
We'll keep the sea, and what care we
  How the maddened ocean raves.
Whatever may blow, where'er we go,
  We'll set our sails to the breeze.
Through lightning and thunder, lee rail under,
  Over the wild white seas.

The wind headed us off to N.E.×E. and at times to E.N.E., but we expected to find a more westerly wind on the English side of the Channel and hoped to be able to make Start Point. It would have been much easier to lay a course upon Guernsey, but without a log we thought it advisable to keep well clear of those intricate waters while the weather remained unsettled. The Solent would also have given us a more comfortable course to steer, but, as Claud Worth has pointed out an error of a quarter of a point either way might in thick weather have led us into the Portland Race or on to the Owers Bank.

From the beginning we realised that we had engaged in a trial of strength with the elements, that success would depend more upon hygiene than navigation, and that the business of keeping

ourselves warm, dry and refreshed by sleep and food was the most serious problem we had to face. I suspect that most of the accidents that happen to small boats at sea are brought about by faulty seamanship, which, in its turn, is primarily due to the physical exhaustion of the crew. We at once divided up the time into watches and, generally speaking, only the man on duty exposed himself on deck, the other two being tucked up in warm blankets below. Towards evening we had a most unfortunate experience. During the prolonged and exceptionally severe tribulations which the dinghy had endured in the Goulet de Brest and Four Channel, a certain amount of water had made its way under the edges of the canvas, and each additional burden had laid her a little more deeply in the water and made the gunwale more accessible to every succeeding deluge. Once her buoyancy was lost no canvas cover in the world would have prevented her from filling when sailing close-hauled in a rough sea. So eventually, long after the worst seas were passed, she shipped just a little more than she could carry, and while running down the slope of a wave the bilge water rushed forward and carried the bows under. Almost at once she turned over on her back. Mustering the entire crew we hove to, dragged her alongside, and hauled her up on the lee deck. Thus draining most of the water out of her we flung her back quickly into the water and then, unlacing the forepart of the canvas, we bailed her dry. We tried to lace down the cover again, but the work was too intricate to deal with in the heavy sea, and we gave it up. Thereafter the dinghy had to be treated as an open boat and required bailing every two or three hours all the way across. This operation was robbed of much of its difficulty during the night by a large and friendly moon, but even so it was a great nuisance and involved much labour and exposure. Only once after the first swamping did we pay the inevitable penalty of neglecting to bail her in time. The experience of turning out at midnight in the bitterly cold wind to haul the dinghy on board and getting wet through in the process taught us a lesson which lasted the whole voyage.

The bearing from the Four Channel to Start Point is N.E.$\frac{1}{2}$E. Thus, allowing a quarter of a point for leeway in the big head sea, our proper course would be N.E. For several hours at the beginning the wind headed us off to E.N.E., but later it backed a little and allowed us for 8 hours to sail N.E.$\times$N. Estimating that we were then back on our course we therafter sailed N.E., 1 point free on the port tack. During the next afternoon the wind moderated a little and backed slightly, and we shook out our reefs and began to make fine speed. The crew were quite fresh, having slept and eaten well, but we had all been drenched so many times that the problem of dry clothes began to be serious. Nothing more quickly devitalises the human body and paralyses initiative than sitting still in wet clothes in a cold wind. Any movement that is made brings a fresh portion of one's body surface in contact with a cold garment, which at once clings to it. The result is that one just sits as still as possible and there is a grave tendency to become so inert that not only does one neglect to attend to any small things that may need doing on deck, but one can eventually become so resigned as to be actually unwilling to go to the trouble of hunting out dry clothes and removing the cause of discomfort. This vicious circle may be a source of real danger to those who make long exposed passages in small boats.

Continuous showers of spray made it impossible to dry anything on deck, so we hoisted all the wet clothes en masse to the mast head on the spinnaker halyard. Hauling them down a couple of hours later we found most of them quite dry. As in the passage to Belle Ile, we had not the remotest idea how far we were from land at any time. Speculating as to our position we rather expected to pick up some coastal lights at about 9 p.m., and were not a little disappointed when darkness revealed only a boundless expanse of sea. It was reassuring, however, to note how much calmer and more orderly the sea had become, for it told that we were under the lee of the Cornish Coast, and presently we entered a definite steamer track, which also was reassuring. There we had our only difficulty with a steamer at night. A tramp, approaching us from the starboard beam, was threatening to run us down and appeared unwilling to alter his course in accordance with the time-honoured rule of the sea. On the contrary, he made signals as though he expected us to get out of his way, a manœuvre which would have put us about. We therefore brought into use an exceedingly powerful electric torch, which we carried specially for that very purpose and focussed the beam upon his bridge. The effect was astonishing. In less time than it takes to write, he altered course and, swinging round through nearly a right angle, gave us the widest possible berth.

At 12 midnight we were much relieved to pick up the Start Light on the port bow, bearing N.N.E. As the tide was setting to westward we held on our north-easterly course till within a couple of miles of Start Point and then altered to N.N.E. for Dartmouth. We were abreast of Dartmouth Castle at 8 a.m., and being then deserted by the wind we took to the sweeps and, making our way slowly into the harbour, came to anchor above

Kingswear at 8.30 a.m., a few minutes after high water. Half-an-hour later it would not have been possible to make the entrance against the ebb.

We consumed a good hot breakfast with relish, but were not by any means unduly tired nor short of sleep. The Customs came out to us, gave some very good advice as to the preservation of our few remaining bottles of wine, and departed with the most cordial expressions of farewell. Wood, being due at the Hospital, caught the morning express to London, while Palmer and I, having two more days available, stayed on with the intention of bringing the boat as near home as possible. We hoped with luck to make the Solent, which would have been within easy distance from London for subsequent week-end cruising. It rained all day until the late afternoon, and we were not able to dry any clothes or bedding. Going ashore in the evening we realised what a pleasure it was to be among those of our own race again, and what a relief to be able to speak in our own language. English towns, English water and, strange as it may seem, English cooking were not least among the things for which we expressed thankfulness. While at Dartmouth we suffered a calamity in the loss of our dinghy cover, which must have taken flight in one of the very heavy squalls which occasionally drove down from the hills.

Wednesday, September 14th

We got under way at 9 a.m. and swept out of the harbour in a light drizzling rain. At the Mew we picked up a breeze from the south-west and laid a course E. on a point 2 miles inside the point of the Bill of Portland. We hoped to make the Bill some time between 7 and 9 p.m., when the tides would be suitable for the passage inside the Race. In our passage across Lyme Regis Bay the wind gradually freshened and backed to the south-east, the rain became steadily heavier and the barometer fell from 30.1 to 29.3. Visibility gradually thickened, and at 7 p.m., when approaching the Bill, one could barely see a few hundred yards in the heaviest showers. Presently we began to catch an occasional glimpse of the Portland Light, bearing S.E., but we did not at any time see more than three of its four flashes. We carried on till the Light bore S.S.E. We could not then have been more than half-a-mile from the shore, but no trace of land could be seen. The lead was of very little help on a bottom which shelved so steeply, specially when travelling at such a speed in so swift a tide. We therefore decided that the inside passage was not navigable under the conditions prevailing, and much as we longed for the shelter of Portland Harbour, we turned back to pass outside the Race. Having an open dinghy to contend with we were anxious to avoid at all costs being drawn into any part of the Race. We therefore sailed west for two hours to stem the east-going Channel tide and prevent the outset from West Bay from carrying us into the edge of the Race. We then sailed south-west for two hours and south for two hours. By that time we thought we were far enough out to avoid the Race, and the wind having veered to the south we sailed south-west for about an hour. The tide was then making to the west again and we had to stem it and at the same time guard against the indraught into West Bay, which would have carried us into the outer edge of the Race. We therefore sailed W.S.W. for a further five hours. Heavy squalls, accompanied by much rain and considerable shafts of wind, were very frequent all through the night. As usual, the dinghy had to be bailed every two or three hours. By 9 o'clock the next morning the Bill of Portland bore north-west, but it was difficult to guage its distance. Thinking, however, that we must be fairly well clear of the Shambles we headed north and ran in towards the coast. We must have been sailing in that direction for nearly an hour before we picked up the Shambles Lightship, and when at length we had left it to port we headed north-west for the entrance to Portland Harbour. Once again we had to stem the tide, which at about 8.30 had turned to the east. The rain cleared during the morning, but a light mist still hung upon the water. We arrived at Portland at 1 p.m. and came to anchor in Old Castle Cove. It was rather distressing to think that we were not more than three or four miles from the point at which we had turned back the previous evening, and that for 24 hours on end—since noon the previous day—we had had the remarkable and heart-breaking experience of finding the tide consistently against us every way we had turned. Unfortunately, our time had expired, and we had no choice but to leave the boat there and take the evening train to London. Subsequent week-ends served to bring the good ship along to Bosham, where we laid her up for the winter close to Mr. Ogilvie's *Thomas Guy*. But those short Sunday passages, however pregnant with incident, and however memorable to the crew, do not rightly belong to the story of this cruise.

Change of Address.

H. M. H. Ashwin, The White Cottage, Finchampstead, Berkshire. 'Phone: Eversley 12.

R. C. B. Ledlie, 23, Beaumont Street, W.

Correspondence.

H. W. Evans' Appeal Fund.

DEAR SIR,—I enclose a copy of the letter which is being sent to Mrs. H. W. Evans, together with a cheque for £731. This is the amount which has been collected as a memorial to the late Dr. H. W. Evans, to which many Guy's men have so generously contributed.

I remain,
Yours faithfully,
H. J. STARLING.

45, All Saints Green,
Norwich.
December 23*rd*, 1927.

DEAR MRS. EVANS,—We are sending you, on behalf of your late husband's friends and grateful patients, a cheque for £731, which we ask you to accept as a token of their love and esteem for him, and with the hope that it will help and comfort both you and your children.

Included in the above is a considerable sum which has been subscribed by medical men from all parts of the country, and in particular by those who knew your husband at Guy's Hospital. These subscriptions were accompanied by letters which showed the wonderful affection in which your husband was held, and the impression which he left upon all who came in contact with him.

This also expresses the good wishes of all your friends, and the hope that the future may bring you happiness through your children and the friends who surround you.

Yours very sincerely,
(Signed) MARGARET HARKER.
ERNEST E. WALKER.
GEOFFREY E. FFISKE.

Enclosure—Cheque £731 (Seven Hundred and Thirty-One Pounds).

December 22*nd*, 1927.

Date of the Rugby Cup Final.

DEAR SIR,—May I bring before the notice of your readers the fact that the date of the Inter-Hospital Rugby Cup Final is *March* 21*st*, 1928, and not March 31st, as advertised in the Fixture Card.

Yours truly,
W. D. G. JONES,
Hon. Sec., R.F.C.

Guy's Hospital,
London, S.E.1.
December 17*th*, 1927.

Sport.

Rugby.

Guy's *v.* Aberavon.

THIS game was played at Aberavon on Saturday, December 10th. Our previous encounters with Aberavon have always been keenly contested and close struggles, and our game last Saturday proved no exception, in spite of the Hospital's heavy defeat.

Guy's had to take the field without P. D. B. Spence and several of the regular forwards—noticeable absentees being W. H. Myburgh and John Durr. Luckily, Boyle stepped into the breach at full back and, in spite of the fact that he had not played for some time, gave quite a good account of himself.

Kicking off with the wind in our favour the first few minutes found our backs being worried by the home fowards.

Robinson brought relief by taking a difficult cross-kick and sprinting some yards before he was overhauled by Griffiths.

The Hospital pressed heavily until Harris kicked into touch. Hayes enabled play to be transferred to our 25. After a smart breakaway he passed to Harris, who was only held up on the line.

With Aberavon penalised, Boyle found touch with a good kick near midfield. The home forwards again broke away, but our defence was equal to the occasion and Malone made a great dribble which compelled Williams, Aberavon's full back, to touch down. At this stage the Hospital XV were combining well and, after a fine passing movement, I. K. Thomas was only pushed into touch near their corner flag. W. C. Thomas broke away and, sending to Jenkins, the latter was cleverly tackled by Boyle.

A mistake by the home side enabled Cameron to lead a rush into Aberavon's 25. A. J. D. Lewis, seizing the opportunity, forced his way over the line, for Tregarthen to add the extra points.

From the kick-off Garland was nearly through on his own, but, passing to Thomas, the latter was caught by the Rev. Thomas when Guy's seemed likely to increase their lead.

Aberavon then took up the attack until Pugh had to leave the field for a few minutes with an injured hand.

Guy's continued to have the better of the exchanges, but the home team's defence held out. A brilliant round of passing by the home backs, initiated by D. Davies, carried play to Guy's 25. A score seemed certain when Jenkin's broke away, but Boyle was safe and brought him down on the line. Aberavon were awarded a free kick and S. Davies, receiving a pass from Harris, crossed our line for a try, which was not converted.

Immediately after the interval Aberavon went away strongly, and with Spence harassed by a high punt C. Griffiths raced along the touch line and scored a fine try, which W. Owen converted. Having secured the lead the home team played with more confidence, but Guy's defended well. A smart round of passing by our three's nearly saw Garland over. From a line out Spence obtained possession and went strongly away, to score in the corner.

By a series of short passes Guy's were nearly through again, but the home backs quickly recovered, and Hopkins, receiving from the base of the scrum, crossed our line, only to be recalled.

Guy's then had hard luck. Garland fell on the ball with the home forwards on top of him, and he could not move. However, Garland was penalised for holding the ball, and Aberavon had no difficulty in taking the lead, C. Griffiths scoring from an easy position.

Guy's tried hard to get on terms, but from a line out Aberavon obtained possession and Roberts scored an unconverted try.

In the concluding stages, which favoured the home side, C. Pugh again crossed our line, but Owen failed to convert.

Result—Aberavon, 1 goal 1 penalty goal and 3 tries (17 points); Guy's, 1 goal and 1 try (8 points).

Guy's Team—V. G. Boyle; G. J. Robinson, D. F. Ryan, F. H. B. Spence, A. J. D. Lewis; T. O. Garland, I. K. Thomas; J. R. F. Popplewell, G. G. Cameron, B. G. Scholefield, J. C. T. Tregarthen, C. D. Malone, A. Simpson-Smith, R. A. P. Hogbin, T. Morgan.

Date	*Opponents*	*Ground*
Dec. 31	Old Merchant Taylors	Honor Oak Park
1928		
Jan. 4	Royal Air Force	„
„ 7	Devonport Services	„
„ 14	Birkenhead Park	„
„ 21	Aberavon	„

Hospital Information, etc.

Pass List.

University of London.

THIRD (M.B., B.S.) EXAMINATION FOR MEDICAL DEGREES
November, 1927

HONOURS

*†R. C. Brock — †N. L. B. V. Eckhoff
‡A. B. Hyman

* Distinguished in Medicine
† Distinguished in Surgery
‡ Distinguished in Pathology

PASS

P. Berry — L. R. B. Birt
F. W. Bradley — M. M. Cowasjee
D. C. M. Ettles — J. G. Kingsbury
L. G. J. Pitt-Payne — E. H. Roche
W. D. Sheldrake — W. R. C. Spicer
J. G. Weston — H. D. Wyse

GROUP I

H. W. Applin — H. N. Collier
S. N. Evans — T. E. Jones
S. C. H. Lane

GROUP II.

E. D. Y. Grasby — S. R. Trick

UNIVERSITY OF OXFORD
December, 1927

SECOND EXAMINATION FOR MEDICAL AND SURGICAL DEGREES

Pathology

W. J. Cotton — F. G. Parker
R. L. P. Peregrine

Forensic Medicine and Public Health

O. A. Beadle — R. E. Havard
E. M. B. West — L. T. Ride

Medicine, Surgery and Midwifery

R. E. Havard — E. M. B. West
J. C. Neely

UNIVERSITY OF CAMBRIDGE
FIRST EXAMINATION FOR MEDICAL AND SURGICAL DEGREES
December, 1927
PART IV

Elementary Biology

T. L. Barbour

Degree of Bachelor of Medicine and Surgery has been conferred on I. A. Jackson

Births.

STEWART—On December 16th, 1927, at Hillside, Umtali, S. Rhodesia, to the wife of Dr. J. Lennox Stewart, D.S.O., M.C., M.B., B.S.(Lond.)—a son.

Deaths.

DUNSTAN—On November 27th 1927, at Brighton, of Robert Dunstan, M.R.C.S., L.S.A., late of Plymouth and Paignton.

NORBURN—Recently in Bath of Albert Edward Norburn, M.D., President of the Bath and Bristol Branch of the British Medical Association.

GUY'S HOSPITAL MEDICAL SCHOOL.

TIME TABLE. SPRING TERM, 1928.

SUBJECTS FOR FINAL EXAMINATION. MEDICAL.

Subject	Lecturer	Days and Times	Place	First Class or Lecture
Surgical Pathology	Mr. Davies-Colley	Mon. and Thurs. at 4.45 p.m.	Museum	Monday, January 9th
Medical Pathology	Dr. Marshall	Tuesdays at 4.45 p.m., and Thursdays at 12 noon.	Museum	Tuesday, January 10th
General Pathology	Dr. Nicholson and Mr. Harding	Lectures. Tues., Thurs. and Fridays at 12 noon. Practical. Daily at 9 a.m.	Pathol'cal Theatre Path'cal Class Room	Tuesday, January 10th Wednesday, January 11th
Ophthalmology	Mr. Ormond	Tuesdays, 9.15 to 10 a.m.	Pathological Th'tre	Tuesday, January 10th
Public Health	Dr. Jameson	Mondays at 4 p.m.	Pathological Th'tre	Monday, January 9th
Applied Anatomy	Professor Johnston	Wednesdays at 12 noon.	Demonst'n Theatre.	Wednesday, January 4th

ORGANIC CHEMISTRY, ANATOMY, PHYSIOLOGY AND PHARMACOLOGY.

Subject	Days and Times	Place	First Class or Lecture
Organic Chemistry (2nd M.B. Part I.)	Lectures. Weds. & Fridays 9.30 a.m. Practical. Mons. & Thurs. 10-1 p.m.	Chemistry Theatre Chemistry Laboratory	Wednesday, January 4th Thursday, January 5th
Anatomy	Senior Lectures. (Neurology). Tues. and Thurs. at 9.30 a.m. Elementary Lectures. Mons. 9.30 a.m. Weds. 11 a.m. Practical Anatomy. Daily from 9.30 a.m. to 5 p.m. Revision Classes. To be announced later Normal Histology. Tues. & Thurs. at 2 p.m.	Anatomical Theatre Anatomical Theatre Dissecting Room Demonstration Theatre Histology Laboratory	Thursday, January 5th Wednesday, January 4th Tuesday, January 3rd To be announced later Thursday, January 5th
Physiology	Elementary Chemical Physiology. (All Junior Students.) Fri., 11-1 p.m. Sat., 10-12 noon. Advanced Experimental Physiology. (Senior M.B. Students.) Mons. and Weds., 11-1 p.m. Clinical Physiology. (All Students). Thurs 12-1 p.m.	Chemical Physiological Laboratory Experimental Physiological Laboratory Clinical Theatre	Friday, January 6th Monday, January 9th Thursday, January 5th
	Tutorial Classes, Elementary. (Junior Medical Students.) Advanced. (All Senior Medical Students.)	To be arranged at a General Meeting of Medical Students attending courses in Physiology, to be held in the Physiological Theatre on Thursday, January 5th, at 10.30 a.m.	
Pharmacology.	Mons. 4 p.m. Fridays, 1.15 p.m.	Physiological Theatre	Friday, January 6th

CHEMISTRY, PHYSICS AND BIOLOGY.

Course	Subject	Lectures	Place	Practical Classes	Place
Pre-Medical Conjoint	Inorganic Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Tues., Jan. 10th at 9.30 a.m.	Chemistry Theatre	Tues. & Thurs. 2–5 p.m. First Class, Thurs. Jan. 5th	Chemistry Laboratory
	Elementary Organic Chemistry	Tues & Thurs. 2 p.m. First Lecture, Tues. Jan. 10th	Chemistry Theatre		
	Physics	Tues. & Thurs. 10.50 a.m. and Tues. 12 noon. First Lecture, Tues. Jan. 3rd	Class Room IV.	Mns. 10-1 p.m. and 2-5 p.m. First Class, Mon. Jan. 9th.	Physics Laboratory
Conjoint	Biology	Weds. 9.30 a.m., Thurs. 12 noon, Fri. 9.30 a.m. First Lecture, Wed. Jan. 4th	Biological Laboratory	Mons. & Fridays 2-4 p.m. First Class, Fri. Jan. 6th	Biological Laboratory
M.B. London	Chemistry	Tues. & Thurs. 9.30 a.m. First Lecture, Tues. Jan. 10th	Chemistry Theatre	Mons. 10-1 p.m., Tues. 2-5 p.m. First Class, Mon., Jan. 9th	Chemistry Laboratory
	Physics	Tues. & Thurs. 10.50 a.m., & Tues. 12 noon. First Lecture, Tues. Jan. 3rd	Class Room IV.	Thurs. & Fridays 2–5 p.m. First Class, Thurs. Jan. 5th	Physics Laboratory
	Biology	Weds., 9.30 a.m., Thurs., 12 noon, Fri., 9.30 a.m. First Lecture, Wed. Jan. 4th	Anatomical Theatre	Weds. & Fridays, 10-1 p.m. & Sats. 11-1 p.m. First Class, Wed. Jan. 4th	Biological Laboratory

EDS. { G. M. H.
E. T. C.